An Inaugural Address

UPON

THE WORK OF THE OBSTETRICAL SOCIETY IN RELATION TO THE EXAMINATION AND REGISTRATION OF MIDWIVES.

Delivered before the Society on March 6th, 1895,

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[DR. CHAMPNEYS commenced his address by a historical review of the position of English midwives, in which he proved their antiquity and showed that movements in favour of their regulation dated from early in the seventeenth century. He continued:]

PROPOSALS FOR THE REGULATION OF MIDWIVES.

In 1813 the Society of Apothecaries endeavoured to persuade Parliament to pass enactments for the examination and control of midwives, making it penal for any woman to practise without a licence gained after examination and given by the committee of the district in which she lived. There were to be twenty-four districts, including London, each with a properly constituted board.[1] In 1869 Dr. Farr, of the Registrar-General's Department, suggested to the Obstetrical Society the investigation of the causes of infant mortality, which was very great, especially among the newly born.[2] A committee was appointed and a paper of questions sent to every Fellow: "(1) What proportion of births is attended by medical men and by midwives? (2) Are the midwives instructed?" 1. It was stated, in reply, that among the poor population of villages 30 to 90 per cent. were attended by midwives. The same proportion obtained in the large provincial towns, and especially in large manufacturing towns, while in the small manufacturing towns the proportion was less. 2. In answer to the second question, replies in the negative were received from all parts of the country.[3] In 1892 the General Medical Council passed two resolutions. 1. In March Dr. (now Sir Henry) Acland proposed, and Dr. Stokes seconded, the following resolution, which was carried: "That a committee be appointed to consider and report whether the General Medical Council has power to make rules for the special education of women, such as may entitle them to obtain a qualification to be certified by the Council, and that the committee do further report for what purpose such qualifications (if any) should be granted." 2. "What are the most desirable means for educating, examining, and certifying in respect of them, with especial reference to midwifery, the management of medical institutions, dispensing, and nursing?" In proposing the motion Dr. Acland stated that "the Medical Act gave the Council the power of providing for the medical necessities of the people." In seconding the motion Dr. Stokes said: "Midwives were practitioners, to a certain extent, of a branch of surgery and medicine. The interests of that large number of the poor who came under the care of these female practitioners ought to be cared for. The Council should not be an examining body, but it should register the qualifications derived from other licensing bodies."[4]

BILLS FOR THE REGULATION OF MIDWIVES.

The following is a brief summary of the various Bills which have been framed for the examination and registration of midwives:—1. In 1813 the Society of Apothecaries, as has been already stated, tried to get Parliament to legislate on this subject, but without success. 2. The Bill of 1878 was part of the Medical Act originally, and was promoted by the General Medical Council. The portion of it referring to midwives was dropped, as it was feared that it might cause confusion between midwives and medical men if both were included in the same Bill. It was introduced into the House of Lords by the Duke of Richmond. 3. A Bill was framed in 1882 by the British Medical Association, but was never presented to Parliament. 4. A Bill was prepared in 1890 by the Midwives' Institute, amended by the Obstetrical Society, the British Medical Association, and a Select Committee of the House of Commons, but was talked out on the second reading by Mr. Bradlaugh, because he disapproved of midwives being required to produce a certificate of moral character before registration, while medical men were not required to do so. The Bill was dropped on the understanding that a Select Committee should be formed to consider the whole subject. On Nov. 29th, 1889, the General Medical Council resolved: "That this Council regards the absence of public provision for the education and supervision of midwives as productive of a large amount of grave suffering and fatal disease among the poorer classes, and urges upon the Government the importance of passing into law some measure for the education and registration of midwives." In April, 1891, the Royal College of Physicians of London appointed a committee to report on the Midwives Bill, and this report expresses the conviction that legislative action is desirable in order to secure the due education, examination, and registration of midwives; and it further recommends that a Parliamentary Select Committee should be asked for, before whom the question might be fully investigated with a view to legislation.[5]

SELECT COMMITTEES.

On June 17th, 1892, a Select Committee of the House of Commons, appointed to investigate the question of the registration of midwives, reported as follows:—

Report of the Select Committee of the House of Commons on Midwives' Registration, June 17th, 1892.

"Your committee have sat six times and have taken most valuable and important evidence from medical men and practitioners in various spheres of practice both in favour of and opposed to the registration of midwives, and also from trained and experienced midwives. This evidence has shown that there is at present serious and unnecessary loss of life and health and permanent injury to both mother and child in the treatment of childbirth, and that some legislative provision for improvement and regulation is desirable. They have also had evidence showing that there is a wide field for training in midwifery now unused connected with parish infirmaries and home practice in populous places. Their inquiries had been cut short by the approaching early dissolution of Parliament, and they therefore report the evidence, and recommend a continuation of the inquiry in the next session of Parliament."

Another similar committee on Aug. 8th, 1893, reported thus:—

Report of the Select Committee of the House of Commons on Midwives' Registration, Aug. 8th, 1893.

"Your committee have sat four times, and have taken most valuable and important evidence, which, with that given last year at six sittings, includes that of distinguished medical men and women in various spheres of practice, both in town and country, and also from trained and experienced midwives from various districts. Your committee are of opinion that a large number of maternal and particularly infants' deaths, as well as a serious amount of suffering and permanent injury to women and children, is caused from the inefficiency and want of skill of many of the women practising as midwives without proper training and qualification. They find that amongst the poor and working classes both in the country and in towns the services of properly trained midwives have been eminently successful and of great advantage to the community. As proved by the evidence before your committee, the services of midwives are a necessity, and, consequently, every precaution should be taken to discourage the practice of women who are ignorant and unqualified. Your committee are of opinion that by legislative enactment no woman should be allowed to call herself or to practise as a midwife except under suitable regulations, but that the term 'registered midwife' should be protected and restricted to those who have been properly trained and who alone should be placed on the Midwives' Register, and that the vested interests of untrained midwives should be efficiently protected by inserting in any future Bill a clause to the effect that any woman who produces evidence that she is in practice as a *bonâ fide* midwife at the time of the passing of the Act shall, without formal registration, be allowed to continue

[1] Aveling, pp. 153-4.
[2] Transactions of the Obstetrical Society, vol. xi., 1869, p. 24.
[3] Ibid., pp. 132 and 987.
[4] Aveling, English Midwives 1872, pp. 175-6.
[5] Midwives' Institute pamphlet, p. 6; Brit. Med. Jour., vol. i. 1891, p. 986.

her calling under the term 'midwife' alone, but shall not be permitted to assume any other title whatsoever. Your committee therefore recommend that a system of examination and registration of midwives should be established, and that for the purpose of admission and examination of women desiring to act as midwives the General (Medical) Council shall be invited to frame rules for regulating: (1) the admission to the Register either by (*a*) practice or (*b*) examination, or by both; (2) the conditions of admission to such examinations; and (3) the conditions of such examinations. These rules and regulations should, in the opinion of your committee, be subject to confirmation by the Privy Council; and in the event of the General Council failing to make such rules as the Privy Council can confirm your committee recommend that the Privy Council should invite some other medical body or forthwith cause the rules and regulations proposed in the foregoing paragraph to be framed for the purposes required, and that such rules shall take effect as if they had been made by the General Council and confirmed by the Privy Council. Your committee also recommend that the duty of carrying out locally the provisions of the Act that will be required should be placed in the hands of the county councils. They also are of opinion that greater facilities for the study of midwifery should be provided in workhouses and lying-in hospitals. In conclusion, your committee desire to refer to the apprehension expressed by certain witnesses belonging to the medical profession, lest their interests might be injuriously affected by an improvement in the status of midwives. The great preponderance, however, of medical and other evidence, having regard to both the authority and number of the witnesses, was to a contrary effect. Your committee, therefore, whilst giving due consideration to the expression of such fears, believe that the suggested injury is not likely to prove serious, and they are of opinion that medical men will not only be relieved of much irksome and ill-paid work, but also that improved knowledge on the part of midwives will induce them to avail themselves more frequently, and at an earlier stage than at present, of skilled medical assistance in time of emergency and danger. On this point your committee had full and substantial evidence."

[Dr. Champneys then quoted from the address of the President, Sir Richard Quain, at the opening of the fifty-fifth session of the General Medical Council, words showing the Council to be in favour of Government education and registration of midwives, though unable to undertake the duties of detail or local arrangements. A charge of the Recorder to the grand jury at the Old Bailey on Jan. 8th, 1894, was quoted, also in support of the compulsory registration of midwives. Dr. Champneys likewise set forth regulations for midwives in foreign countries. He continued:]

THE HISTORY OF THE OBSTETRICAL SOCIETY.

We now come to deal with the history of our own society in relation to this question. On Nov. 4th, 1870, the Council passed a resolution in favour of the institution of a voluntary examination for midwives.[6] This resulted from a committee under the presidency of Dr. Hall Davis. At the annual meeting of the society on Jan. 3rd, 1872, the scheme of such an examination, with by-laws, was presented to the society and passed unanimously. It is essentially the same as at present, and the law referring to the granting of the certificates runs thus: "V. That, on satisfying the Board of Examiners as to her qualifications the midwife should receive a diploma certifying that she is a skilled midwife competent to attend natural labours."[7] At the annual meeting, Jan. 6th, 1875, the President (Dr. Tilt) in his address said: "Last year Lord Aberdare and Mr. Stansfeld were in office; they favourably entertained the views repeatedly brought forward by the society, and they were prepared to bring in a Bill for the better education and registration of midwives, when a change of Ministry convinced your Council that the question must be left in abeyance. ..... Ours is the only civilised country that has left unregulated the midwifery of the humbler classes, and it is a disgrace to obstetric medicine that there should be no means of preventing an incompetent and drunken woman from assuming the name and the duties of a midwife."[8] In 1873 the Council referred the matter of branch examinations and registration of midwives to a committee, who reported as follows: "The Obstetrical Society of London, having had repeatedly and urgently brought before its notice the sacrifice of human life and health occasioned by the practice of ignorant midwives, has already instituted an examining board for testing the knowledge of women desiring to follow the calling of a midwife, and has granted certificates to those who have satisfied its examiners." It then proposed methods for branch examinations and for the registration of midwives.[9] On June 6th, 1877, the President, Dr. West, informed the society that a deputation had waited upon the Lord President respecting the examination and registration of midwives.[10] At the annual general meeting, Jan. 2nd, 1878, the President (Dr. West) again referred to the subject as follows: "His Grace the Lord President of the Council expressed himself as favourable to the principles which the scheme embodies. It was afterwards laid before the Medical Council, who approved its object. In order to correct various legal and technical imperfections it was submitted to Mr. Roscoe, the legal adviser of the College of Physicians." The President then proceeded to deprecate the postponement of a settlement of this question till that of the admission of women to the profession was settled, and he pointed out that if women were admitted to, and even if men were excluded from, the medical profession, the poor, especially in the country districts, would be just as ill provided as at present. He urged the duty of the society, not as medical men, but as citizens, "to secure some guarantee that the poor shall not continue to be exposed to an ignorance and unskilfulness against which the Government of every other civilised country has protected them."[11] In 1879 the President (Dr. Playfair) informed the society at the annual meeting that "the principles of the scheme [for the examination and registration of midwives] not only met with the approval of the Medical Council, but were embodied by His Grace the Duke of Richmond in the Medical Acts Amendment Bill, which, but for the troubles in the East, would, there is every reason to believe, have passed both Houses of the Legislature."

THE CERTIFICATE OF THE OBSTETRICAL SOCIETY.

The following is the form of certificate drawn up by the solicitor to the Society, and hitherto in use. It dates from March, 1887[12]:—

"*Obstetrical Society of London.*

"We hereby certify that has passed to our satisfaction the examination instituted by the Obstetrical Society of London, and that she is, in our opinion, a skilled midwife, competent to attend natural labour."

(Signatures of President, Chairman, Honorary Secretaries, and Examiners.)

(*Undertaking signed by the Midwife*)

"I undertake to abide by all the rules and regulations of the Obstetrical Society with regard to the duties and conduct of midwives, and to submit to the jurisdiction of its Council in the decision of all matters relating to my conduct as a midwife. I further agree that in case I shall hereafter be convicted of any criminal offence, or be guilty of any act or conduct which in the opinion of the Council renders me unfit or unworthy to hold its diploma, the same may be forfeited by a resolution of the Council, in which case I will, on receiving notice in writing of such resolution, to be served either personally or by leaving the same at my then present or last known place of abode in the United Kingdom, forthwith give up such diploma to the President, or to one of the Secretaries for the time being of the Society; and I agree that my name may be removed from the Register of Midwives kept by the Society, and I promise thenceforward to desist from the use of any designation or title implying possession of such diploma.

(Signature of Midwife.
Seal of the Society.)"

The Council were expressly advised that no technical meaning attached to the word "diploma," and that it had precisely the same meaning as "certificate." In 1889 the chairman of the Board for the Examination of Midwives reported that the Society had added a declaration or *sponsio* (see above), which each midwife would have to sign, in which she agrees to submit to the jurisdiction of the Council in all matters relating to her conduct as midwife, and to give up her diploma if the Council shall consider her conduct such as to render her unworthy to hold it. This she signs in a book and also on her certificate.[13]

CORRESPONDENCE BETWEEN THE GENERAL MEDICAL COUNCIL AND THE OBSTETRICAL SOCIETY.

On Jan. 4th, 1893 the Council considered the following letter from the Registrar of the General Medical Council:—

"General Medical Council, 299, Oxford-street, London, W.,
"December —, 1892.
"(Before December 16th.)

"Sir,—In reference to the giving of certificates or diplomas in midwifery, the General Medical Council, at its recent session, passed the

[6] Council Minutes, p. 243.
[7] Transactions of the Obstetrical Society, vol. xiv. 1872, p. 21.
[8] Ibid., vol. xvii., 1875, p. 33.
[9] Council Minutes, p. 281.
[10] Transactions of the Obstetrical Society, vol. xix., 1877, p. 136.
[11] Ibid., vol. xx., 1878, p. 13.
[12] Council Minutes, p. 542.
[13] Transactions of the Obstetrical Society, vol. xxxi., 1889, p. 71.

following resolution, which, in the President's name, I have been directed to communicate to you: 'That the President be requested by the General Medical Council to point out to the institutions and persons who grant such certificates that the certificate should be expressed in such a form as not to lead to the impression that it is a legal qualification to practise midwifery.'

"I am, Sir, yours faithfully,

"W. J. C. MILLER, Registrar."

The following resolution was passed by our Council: "That the Secretary be requested to reply to the President of the General Medical Council, to enclose a copy of the diploma of the Society, and to point out that it is merely an expression of opinion on the part of the Society, and that it does not express any opinion as to the competence of the midwife, except so far as concerns natural labour."[14] At the annual meeting, Feb. 1st, 1893 the Chairman of the Board for the Examination of Midwives, after quoting the proportion of failures in successive periods, and their steady diminution owing to increasing competence of the candidates, defined the scope of the Society's certificate as follows: "When it is remembered that the Society's certificate is merely an expression of opinion by the Society that the holder of it is competent to attend natural labour, and that no legislation has taken place, either for the purpose of preventing uncertified persons from calling themselves midwives or even for registering midwives, it is plain that the work which the Society has voluntarily undertaken and carried on for twenty-one years is highly and increasingly appreciated by the midwives and by the public generally."[15] On April 4th, 1894, the Council considered a letter from the Lancashire and Cheshire Branch of the British Medical Association protesting against the promotion of legislation for the registration of midwives.[16] On July 4th, 1894, the Council considered the following resolution from the General Medical Council of May 22nd: "That, in the opinion of the Council, to issue to any person not legally qualified for registration any certificate of competency or other document so framed as to bear a colourable resemblance in appearance or phraseology to a diploma conveying a right to act as a medical practitioner, is a proceeding which directly contravenes the spirit of the Medical Acts, and is accordingly liable to be visited with the condemnation of the Council. The President is, therefore, requested to repeat a warning, already given to certain institutions, and to urge the registered practitioners connected with institutions granting the certificates to nurse-midwives to carefully reconsider the terms in which they are framed, so as to bring them into harmony with this resolution." To this (which was apparently a circular sent to a large number of certifying institutions without distinction, in which no statement appears that the General Medical Council had anything to find fault with in the certificate of the Society) the following reply was sent: "That the General Medical Council be informed that, with regard to the printed resolution passed May 22nd, a copy of which was sent to the Obstetrical Society, the certificate of the Society was drawn up many years ago with a view to avoid the possibility of its being used as a diploma conveying a right to act as a medical practitioner; that it has been subjected to legal criticism on this point, and has been framed in accordance therewith. The Council of the Obstetrical Society feel sure that the General Medical Council appreciate the care which has thus been exercised in accordance with the views expressed in their resolution."[17] On Monday, Dec. 3rd, 1894, the General Medical Council passed the following resolutions: (*a*) "That the Council, being of opinion that certain documents issued by various societies or persons as diplomas of education and examination in midwifery are 'colourable imitations' of diplomas conferring a legal right to admission to the Medical Register, and both contravene the spirit of the Medical Acts and are calculated to deceive the public, hereby give notice that from the present date the issue of such 'colourable imitations' by registered practitioners will be regarded as conduct infamous in a professional respect." (*b*) "That in the opinion of the Council the form of the certificate now before the Council, and purporting to be granted by the Obstetrical Society of London on July 20th, 1894, is such that it may be regarded as a document coming within the purview of the foregoing resolution; and that this opinion be communicated to the President and Council of the Obstetrical Society."[18] This action was taken at the instigation of the Lancashire and Cheshire Branch of the British Medical Association, whose object is stated above.[19]

[14] Council Minutes, p. 673.
[15] Transactions of the Obstetrical Society, vol. xxxv., 1893, p. 46.
[16] Council Minutes, p. 696.
[17] Ibid., p. 702.
[18] THE LANCET, Dec. 8th, 1894.

THE SECTION OF THE MEDICAL ACT.

The section of the Medical Act referred to by the General Medical Council runs as follows:[20] "If any registered medical practitioner shall be convicted in England or Ireland of any felony or misdemeanour, or in Scotland of any crime or offence, or shall after due inquiry be judged by the General Medical Council to have been guilty of infamous conduct in any professional respect, the General Medical Council may, if they see fit, direct the registrar to erase the name of any such practitioner from the Register." In a debate in the General Medical Council, May 22nd, 1894,[21] Mr. Wheelhouse claimed that "an attempt was made to evade the conditions of the Medical Act of 1886, and to institute an entirely new class of practitioners, who were only to be partially educated, and in midwifery only." Dr. MacAlister said the Council had no power to prevent persons practising without a diploma, and it was preposterous that they should be asked to say that any person giving a testimonial to another person was guilty of infamous conduct. Such certificates gave no legal qualification to practise, and it was never intended that they should; they were simple testimonials that in the opinion of certain gentlemen a person was qualified to do a certain thing. He had constantly given testimonials to his pupils that in his opinion they were qualified to act as house surgeons or house physicians, but should be very sorry indeed to be charged with infamous conduct for so certifying to his personal knowledge. These certificates were of the same nature. What they were really asked to do was to say that no woman should help any other woman in her labour unless she had a licence to practise. That mere statement was sufficient to show that the whole agitation was preposterous. There were between 10,000 and 15,000 midwives at this moment, and they could practise, whatever the General Medical Council or the Obstetrical Society might do to prevent them. Was it better or worse that these women should have absolutely no education or that some of them should be educated? To prevent any examination or testing of their somewhat imperfect education was to stop that education altogether. The resolution, as proposed, was itself an illegality, and it would not be sustained in the law courts.

[Dr. Champneys then quoted opinions of the medical press in favour of the registration of midwives, and gave the statistics of the examination of the Obstetrical Society since 1872, which showed a regularly increasing number of candidates, with a total number now on the register (including January, 1895) of 2166.]

THE SCHEDULE ISSUED TO CANDIDATES BY THE SOCIETY.

The following is the schedule issued to candidates by the Society:—

OBSTETRICAL SOCIETY OF LONDON.

Regulations for the Examination of Midwives.

The Obstetrical Society of London grants a diploma, certifying that the bearer is a skilled midwife, competent to attend natural labours, on the following conditions:—

Each candidate must submit to the honorary secretaries of the society—

(*a*) Sufficient evidence of good moral character.
(*b*) A certificate showing that she is not under twenty-one years of age.
(*c*) Proof of having personally attended not less than twenty-five labours under supervision satisfactory to the Board of Examiners.

Each candidate will be required to pass (1) a written and (2) an oral and practical examination in the following subjects:—

(*a*) The Elementary Anatomy of the Female Pelvis and Generative Organs.
(*b*) The Symptoms, Mechanism, Course, and Management of Natural Labour.
(*c*) The indications of Abnormal Labour, and the emergencies which occur in practice.
(*d*) Hæmorrhage, its varieties, and the treatment of each.
(*e*) Antiseptics in Midwifery, and the way to use them.
(*f*) The management of the Puerperal state, including the use of the Thermometer and the use of the Catheter.
(*g*) The management (feeding included) of new-born Children.
(*h*) The duties of the Midwife with regard to the Patient, and with regard to the seeking of Medical advice.

The written examination is held at the Society's Library on the second Wednesday of the months of January, April, July, and October, at 8 P.M.; the practical and oral examination from one to two weeks later.

The fee for the examination is one guinea; in the event of candidate failing to pass half the fee will be returned.

[19] THE LANCET, Dec. 8th, 1894.
[20] Medical Act, 1858, 21, 22 Vict., cap. xc., s. 29.
[21] Brit. Med. Jour., May 26th, 1894.

Successful candidates will be required to sign the declaration quoted above.

OBSTETRICAL SOCIETY OF LONDON.

Examination of Midwives.

This schedule is to be filled up and returned to the honorary secretaries, Obstetrical Society, 20, Hanover-square, W., together with the examination fee (21*s.*), at least fourteen days before the date of the examination—

Name (Full Christian and Surname to be stated).

Age.

Married, Widow, or Single.

Present Address.

Permanent Address.

(*a*) Certificate of Good Moral Character.

(To be filled in and signed by some responsible person, whose address must be stated, who can vouch for the character of the Candidate.)

(*b*) Certificate of Age.

(A Certificate of Registration of Birth should be sent in; or, if that cannot be obtained, one must be entered here showing that the Candidate is not under 21 years of age, and signed by some responsible person, whose address must also be stated.)

(*c*) Certificate of Attendance on Labours. } *I certify that the above-named has attended not less than twenty-five labours.*

*Signed*_____

(No Labour can be counted among the 25 certified unless the Candidate has repeatedly examined and watched its progress, and has diligently attended the Lying-in for at least ten days.)

THE VALUE OF MIDWIVES.

[After stating that it was not his intention to discuss whether midwives are a good or an evil, Dr. Champneys continued:]

The following propositions appear to be established: 1. Any person is at liberty by the law of the land to render aid to any other in time of sickness, if desired. 2. Any person is at liberty by the law of the land to receive such aid from any other. 3. Unskilled aid leads to lamentable consequences to poor mothers and children. 4. "Midwives are a necessity." It follows that midwives, who are a "necessity," must either be unskilled, with lamentable consequences, or skilled, to render services "eminently successful and of great advantage to the community." It also follows that the supply of skilled midwives can only be maintained by some method securing at least a minimum of experience and skill. As regards the experience of examination of midwives and medical students, my own judgment is that, within much narrower limits, midwives who pass our examination give evidence of theoretical and practical knowledge which would not disgrace students who pass the Conjoint examination; this is also the opinion of all of whom I have asked this question—and they are many. The question is not whether midwives shall exist, but whether they shall be as bad or as good as possible. To put the question briefly, absence of examination and registration of midwives means widespread loss of life and health to mothers and children; for not only are midwives a "necessity," but there is no power to prevent any of the Queen's subjects from acting as a midwife. The opposition which has sprung up aims at the abolition of midwives; but it is quite beyond the power of the agitators to do this, and they know it. What they think they can do is to prevent their examination and registration, and they have aimed at our Society as the principal obstacle in their way. As we have seen, this attack, if successful, would merely result in the destruction of life and health of many poor mothers in England. Is it too late to appeal to those who have joined this agitation with insufficient knowledge to consider the misery entailed by the infection conveyed by such women as would alone remain, and the nameless horrors perpetrated by them?

THE INTERESTS OF THE POOR ARE THE ONLY INTERESTS WORTHY OF CONSIDERATION.

As doctors, we have a right to exist only so long as we are required. Midwives have precisely the same claims. If they are required, they will exist; if they cease to be required, they, like us, will cease to exist. Doctors are made for the sick, and not the sick for doctors. A patient is a person who requires a doctor; a doctor is not, in the same sense, a person who requires patients. A patient is not, primarily, an organism for excreting so many guineas or shillings per annum as an aphis exudes syrup at the titillation of an ant or a cow secretes milk under the blandishments of a dairymaid. This is a fact often forgotton. If a poor woman requires a doctor for her confinement she can have one. If she prefers a midwife she can have one—trained, certificated, and comparatively safe; or she can have one untrained, uncertificated, ignorant, septic and fatal.

Besides this, our profession claims, or accepts without protest, the title of "noble" which is so often bestowed on it. To what does it owe its nobility? Surely to the unselfishness which is one of its best traditions. Our profession glories in postponing its private interests to the good of the public. It has abolished profit making by secret remedies, and has come to look upon it as really (and not in the sense of the General Medical Council) "infamous." Why is it more infamous for a medical discoverer to make money out of his secret knowledge than for a man in business, such as a brewer, to do the same? Simply on account of this claim of "nobility." In what other profession can you parallel the enthusiastic propagation of the great class of remedies which began with Jenner's vaccination, and have been so marvellously extended at the present day; or of the wholesale benefits of preventive medicine? It is to be remembered that every such improvement means, in the first instance at least, loss of income to the whole profession. And yet no medical man has ever been known to protest against measures for the preservation of life and health, "though it were to his own hindrance." I confess that the bacillus of cholera seems to me to stand on the same footing as those of septicæmia, and that the profession whose glory it is to endeavour to destroy the one should not regard with levity the chances of the spread of the other. I have said that our profession stands alone in its attitude in this respect. Yet I imagine that other professions, who make no such claim to pre-eminent virtue—as, for example, the legal profession—would stand aghast at a proposition which would be likely to set their fellow countrymen by the ears, even if they saw their own profit in such an event. I think that there is little "nobility" to be seen in the present agitation.

REGISTRATION OF MIDWIVES THE BEST PROTECTION OF THE POOR.

The malpraxis of midwives is an argument often used against them. For the malpraxis of unregistered midwives there is no remedy but the common law. Against the malpraxis of registered midwives the undertaking signed by each of our midwives (quoted above) protects the poor, even where the law could not touch the offender.

REGISTRATION OF MIDWIVES THE BEST PROTECTION OF MEDICAL MEN.

The same undertaking guards doctors against the usurpation of medical functions, such as prescribing, by midwives. Any of our midwives so acting is liable to be struck off the register and deprived of her certificate. These irregularities on the part of midwives are simply the result of absence of proper control. Over uncertificated midwives no control is possible so long as they keep clear of the law. Over our own midwives we have a very considerable hold by means of the undertaking signed by each successful candidate, and quoted above. If offences by midwives holding our certificate were only reported to us we would deal with them.

THE LENGTH OF TRAINING OF MIDWIVES.

Among many arguments against the registration of midwives may be mentioned one—that the present length of their training is insufficient. This is purely a matter of money. The midwives are poor women, and find it difficult to procure the money to pay for their present training and examination. In many cases this is provided, partly or entirely, by their more wealthy friends, and often with the view of acquiring the services of a midwife for a country district. In many foreign countries the expenses are defrayed by the State. Until midwives are subsidised, either by the State or by some other extraneous body, it is useless to expect an increase in the length of their training. The means of subsistence must be provided somehow; if by the midwives themselves the course of training must necessarily be short; if it is desired to lengthen it (an object much to be wished) the money must be provided by extraneous aid. But some training is better than no training at all.

THE INTERESTS OF DOCTORS NOT PREJUDICED BY PROPERLY REGULATED MIDWIVES.

But we must remember that the Select Committee (quoted above), after hearing the evidence for and against the proposition that midwives injure doctors, pronounced emphatically that the reverse was the case, and it is within the knowledge of Fellows that midwives are in some districts actually provided by doctors to help them with cases of natural labour among the poor. And even some of our medical schools make use of them.[22] It is hard to imagine that the few shillings, which is all that many of the poor can afford for a confinement, can in any sense repay a medical man for the time expended, or that the bodily handing over of all such cases to trustworthy midwives would be anything but an unmixed relief to the hard-worked doctor of poor districts. I expect the real difficulty is the fear of the loss of a connexion, in the absence of a universal agreement in a district to this effect, loyally kept.

THE MOTIVES OF OUR SOCIETY.

The motives of our Society in instituting and carrying on this examination have been (I state it without any qualification) absolutely unselfish and disinterested. We began the work because there was no other competent body to begin it; we have continued it purely from public spirit. We have sought again and again to be allowed to transfer it to a State-regulated machine. For years our examiners did the work without a farthing of remuneration, generally on a night which was their only relief in the course of the tedious task of examining for the Conjoint Board. Our motives in this respect have been tacitly acknowledged, except by an occasional writer to one of the journals. To any such innuendos the answer is plain—the Society never ceases to beg to be relieved of its responsibilities in this respect and of its emoluments. Such, gentlemen, is our infamy.

THE ACTION OF THE GENERAL MEDICAL COUNCIL.

The action of the General Medical Council is still an enigma to us. It might be conceivable that its opinion was that the abolition of midwives was desirable had it not, in common with all the highest and most competent bodies, repeatedly and strongly stated that the examination and registration of midwives were highly desirable, thus emphatically endorsing the work of our Society. But, as its verdict has over and over again been in favour of such work, it is a little difficult to understand so violent a deviation as its last communication. Perhaps this is the parable of the importunate widow over again; and perhaps it has, in a moment of annoyance, vented its wrath, not against those who have troubled its repose, but against an unconscious and innocent object. That it, like other representative bodies, is afflicted with the restlessness of "Irish members," who are not always Irishmen, is quite possible. That it is not in possession of the facts or history of the question is almost certain. It is, indeed, scarcely to be expected of a body containing at the present time not a single English obstetric physician. We do not yet know of what we are accused. That the Act of Parliament ever contemplated so violent a distortion of plain English as is implied by the application of the word "infamous" to work like ours, undertaken twenty-three years ago, and carried out at the cost of much time, thought, and hard work, in a public-spirited and self-denying manner ever since, is inconceivable. That it should threaten to apply such a word to a body of men such as those who have been mainly responsible for the work carries, I venture to think, its own refutation and condemnation. That those who framed the Medical Act ever contemplated the classification of (alleged) defects in a certificate together with murder, theft, and unnatural offences is unthinkable. I have little doubt that when the General Medical Council realises that it is asked to play the *rôle* of a puppet of a party of interested practitioners its own sense of dignity and of the purposes for which it was created will come to its aid; indeed, this is plainly foreshadowed in one of the speeches which I have quoted. If the General Medical Council is free to call any person or any act "infamous" when it chooses the position of every medical man is most unenviable. What is to prevent the application of this word to the shape of a collar or the colour of a tie? But it is incredible that the Legislature ever intended to hand over any profession to an arbitrary and irresponsible tyranny such as this would be. Indeed, in a recent case in the Court of Appeal, Feb. 23rd, 1894, the Master of the Rolls adopted a definition prepared by Lord Justice Lopes as applicable to the case—namely, if a medical man in pursuit of his profession had done something with respect to it "which would be reasonably regarded as infamous by his professional brethren of repute." In the face of the work which our Society has done and of the names of the men who have done it, including practically all the leaders of our branch of the profession in London, it is too absurd to think that our action, or their action, would have the remotest chance of "being regarded as infamous by their professional brethren of repute." Surely, in any movement for the saving of the lives of poor women the General Medical Council ought to stand side by side with those who for twenty-three years have been working for this object in a way which ought to command their respect, rather than to run the risk of appearing for a moment as the partisans of a trades-union. That it should appear for a moment in such a light has been a great and painful shock to us. To have such an epithet as "infamous" applied to us makes us no nearer infamy than before, though I confess that I imagined that work such as ours, carried on merely with the object of helping and protecting the poor, deserved another name. But I believe that neither Sir John Williams, Dr. Watt Black, nor I, who have acted firstly as chairmen of the Midwifery Board and afterwards have been called to the presidential chair, and are therefore, perhaps, the most "infamous" among "infamous" men, feel the least ashamed of our work, conscious as we are of our own integrity and of the great injustice which has been done to us all. As regards the form of our certificate, if the General Medical Council had told us that they thought it open to objections we should have at once done what we are now doing, asked for its criticism with a view to their removal. To have helped us to remove any cause of offence would have earned our gratitude. I cannot but think that when it has mastered the subject and had time to think the General Medical Council will regret what it has done, not only towards men as honourable as any of its members—whose life and work are well known to it—but to a meritorious and public-spirited society.

It is a significant fact that the number of candidates for our last examination has hardly ever been exceeded, not less than 114 women having presented themselves, and that in spite of our having held our certificate in abeyance.

If there is one thing certain in the world it is the ultimate triumph of right. It may be opposed—it may be misunderstood—it may be reviled—it may have to suffer; but "Magna est veritas, et prævalebit."

Since the above was written the following communication has been received from the General Medical Council:—

General Council of Medical Education and Registration of the United Kingdom, 299, Oxford-street, London, W., March, 1st, 1895.

SIR,—In answer to your letter of Jan. 14th, 1895, I have to inform you that the Executive Committee of the General Medical Council has passed thereon the following resolution (whereof you will find a copy on the next page).

I am further directed to inform you that the committee passed, in regard to certain other certificates that had been submitted to the Council, the following resolution (whereof you will also find a copy on the next page). I am, Sir, yours faithfully,

W. J. C. MILLER, Registrar.

Dr. William Duncan,
Hon. Sec. of the Obstetrical Society of London.

Resolved—"That the Executive Committee are of opinion that the words in the diploma 'a skilled midwife competent to attend natural labour' are open to legal objection, seeing that under the Medical Act (1886) Midwifery is one of the three branches in which a regular practitioner must pass an examination in order to obtain a registrable qualification.

"The above-cited words suggest that the holder has a registrable qualification This both contravenes the spirit of the Medical Act of 1886 and is calculated to deceive the public.

"Again, the formal character of the document, which is described on its face as a diploma, is fitted to deceive the more ignorant part of the public—that part which most needs protection.

"That the Executive Committee request the President and Council of the Obstetrical Society of London to inform the General Medical Council, within one month, what steps they have taken to bring their certificate within the terms of the resolution of the Council."

Resolved—"That as this Council has been instituted to regulate the education of practitioners in medicine, surgery, and midwifery, as well as to enable the public to distinguish between qualified and unqualified practitioners, the Executive Committee cannot approve of any document professing to qualify persons for any practice in medicine, surgery, or midwifery, issued by any body or institution which is not a medical authority under the Medical Acts."

The Executive Committee further declare that medical practitioners, who sign such documents, will be liable to the censure of the Council in accordance with the following resolution passed by the Council on May 22nd, 1894.[23]

"In the opinion of the Council, to issue to any person not legally

[22] Guy's Hospital Gazette, Feb. 9th, 1895.

[23] Minutes, vol. xxxi., p. 45.

qualified for registration any certificate of competency or other document so framed as to bear colourable resemblance in appearance or phraseology to a diploma conveying a right to act as a medical practitioner is a proceeding which directly contravenes the spirit of the Medical Acts and is accordingly liable to be visited with the condemnation of the Council."

The Council of the Society has already taken steps with the view of removing all causes of offence, now for the first time specified, from its certificate. This it would have done in the first instance had it received the necessary information. In doing so it by no means acknowledges that such causes of offence are well founded.

AN ANALYSIS OF THE CASES OPERATED UPON WITH THE MURPHY BUTTON UP TO DATE.

By JOHN B. MURPHY, A.M., M.D. CHICAGO,
PROFESSOR OF SURGERY AND CLINICAL SURGERY, COLLEGE OF PHYSICIANS AND SURGEONS, CHICAGO; PROFESSOR OF SURGERY, POST-GRADUATE MEDICAL SCHOOL AND HOSPITAL, &C.

A SUFFICIENT time has now elapsed to warrant a complete report of the cases operated on by means of the button and to justify us in drawing conclusions as to the field of its usefulness. The advantages and disadvantages of the device were at first theoretical; they were later sustained or controverted by the results in experiments and in a small number of cases; finally, we have now a very large number of cases from which to draw conclusions, and a sufficient number, I believe, to enable us to make valuable deductions for our guidance in the future. We will consider the cases in groups, and we will pay particular attention to the fatal cases, and endeavour to determine the cause of the fatality—whether it was a result (*a*) of the disease itself; (*b*) of the general condition produced by the disease; (*c*) of the operation; (*d*) of failure in obtaining a perfect result at the seat of approximation; (*e*) of a sequel of the operation; or (*f*) of intercurrent causes. With this general plan as a guide we will take up the subject as follows.

GASTRO-ENTEROSTOMY FOR MALIGNANT DISEASE BY LATERAL APPROXIMATION.

Of this variety we had 27 cases with 9 deaths. In the first fatal case the patient had suffered from severe hæmorrhage for four weeks preceding the operation, and it was hoped that by performing a gastro-enterostomy a contraction of the stomach would take place, and possibly hæmostasis. The operation was performed in seven minutes, but the bleeding continued as before and ended fatally four days later. The necropsy showed a perfect approximation. In the second fatal case the patient died of exhaustion forty-eight hours after the operation. A perfect approximation was found. In the third fatal case the patient was very much emaciated and depressed before operation and died twelve hours after. The necropsy showed a perfect approximation. The fourth death occurred from exhaustion in twelve hours. The fifth death was in a case in which the smallest-size button was used, as the operator had no other at the time. The button was so small it was impossible for it to hold a sufficient amount of the tissue to retain the margin of a thick wall, as of the stomach, within its grasp; the wall slipped away from the clasp of the button, and the contents escaped into the peritoneal cavity and caused death. The smallest-size button should never be used in any operation on the stomach. The sixth death occurred from circumscribed peritonitis on the third day. On post-mortem examination the approximation was perfect, and in the stomach was found a large ulcer which was probably the source of the infection. There was also cancer of the pancreas, liver, and other organs, all of which contributed to lessen the resistance of the tissues against infection. In the seventh death the patient died of exhaustion four days after operation. There was perfect approximation, no infection, and the button was still in position. In the eighth fatal case the patient died on the seventh day from general suppurative peritonitis. The necropsy showed perfect approximation and the button still in position; the cause of the peritonitis was not given. The ninth death was from septic peritonitis. The button was not pressed tight enough, and one edge of the stomach had slipped away. It will be noticed that four of the nine deaths were from exhaustion, two from imperfect operation, and three from peritonitis from infection at the time of operation. Are we justified in operating in these extremely emaciated, cachectic patients with cancer of the pylorus? The patients as a rule survive the operation but a very short period of time, when they succumb to the marasmus of the disease, and not to the effects of obstruction of the pylorus. It is my opinion that patients who are not in a condition to stand a pylorectomy should not be operated on. The relief obtained, even where gastro-enterostomy is successful, is so limited that it does not justify the danger and discomfort produced by the operation, notwithstanding that the operation can be performed with the button in from five to seven minutes. These patients suffer much more from shock in operation than those with non-malignant disease, and the regenerative power of the tissues in a patient with malignant disease is much impaired. Therefore in this class of cases I scarify with the point of a needle the surfaces of the peritoneum of the stomach and intestinal wall where they are brought in contact; this hastens the primary adhesions and increases the rapidity of definitive union. A few interrupted sutures half an inch from the button between the intestine and stomach may be necessary where there is great traction of the coil of intestine approximated, but I have so far not found a case in which I considered it indicated. I prefer the Von Hacker position, though the Wölfler may be used. I believe with Dr. Willy Meyer that the former favours the passage of the button into the intestine. If the cancer involves but a small portion of the stomach in the neighbourhood of the pylorus the most satisfactory operation in its ultimate result is a division of the duodenum two inches below the pylorus, closing the proximal end with a Czerny-Lembert suture and joining the distal end to the posterior wall of the stomach with the button. In non-malignant strictures of the pylorus this is the only operation that should be performed. Where the approximation has been made to the anterior wall of the stomach the button has dropped back into the stomach in four cases; in none of them did it give any unpleasant symptoms, and I believe it would have passed as soon as the stomach contracted to its normal size and the patient was up and about. I have not used the oblong button for this operation and do not consider it necessary, as the results so far prove that the opening made by the circular button is ample, and that the scar does not contract. The oblong button has, however, certain merits. It produces a larger opening; it is more easily inserted than the circular, and passes through the intestine with greater freedom as its diameter is only $\frac{5}{8}$ in. The only two cases in which it has been used are the following:—Case reported by Dr. Joseph D. Bryant of New York: "Diagnosis, fæcal fistula of long standing. There had been several previous operations for its closure. Operation, May 9th, 1894. Lateral approximation of ileum to descending colon with oblong button (2½ in. in length); button was easily inserted. Convalescence was uneventful. Button passed on fifteenth day." Case reported by Dr. Willy Meyer of New York: "Male aged twenty-two years. Fistula in right inguinal region. History of appendicitis; abscess opened; fæcal fistula followed. Laparotomy, May 31st, 1894. Chronic appendicitis; appendix embedded in dense adhesions, perforated; resection of appendix; loose tampon; appearance of fistula which baffled treatment. Aug. 16th, 1894, ileo-colostomy by Murphy's oblong button. Its two halves could be tied in with great ease and did not require a longer slit in the gut for insertion than the ordinary button. Recovery. Button voided without any difficulty on the tenth day."

CONCLUSIONS.

1. Gastro-enterostomy should never be performed on an extremely cachectic patient.
2. The Von Hacker position is preferable.
3. A supporting suture outside of the button is not necessary except for the relief of tension.
4. In non-malignant stricture of the pylorus the end of the duodenum should be united to posterior wall of the stomach.
5. Pylorectomy by the method described below should always be resorted to where possible.
6. The patient should receive liquid nourishment immediately after the effects of the anæsthetic pass away.

PYLORECTOMY.

Pylorectomy is always the most desirable operation for malignant stricture of the pylorus, as it is the only operation

that offers hope of prolonging the life of the patient for a considerable time. When it is successful the patient regains his usual vigour rapidly and is in good physical condition until the disease recurs. The period of immunity frequently extends over many months and occasionally years. By the use of the button the operation of pylorectomy is relieved of its greatest dangers—viz., shock and leakage at the seat of approximation. The operation is best performed in the following manner:—First, ligate the mesentery on the upper side of the stomach, pylorus, and duodenum as a broad pedicle with from three to four double ligatures and cut between. Second, ligate the mesentery on the under side in the same manner; the pylorus can then be lifted well up into the abdominal incision. Third, pack thoroughly around with gauze and place two clamps on the stomach, one above and the other below the place to be incised. Fourth, a circular incision is then made in the stomach, including the peritoneum and muscularis; this is pushed back half an inch and the mucous membrane cut off; the latter is rapidly closed with a continuous suture; the serosa and muscularis are then closed with a continuous Lembert. Two clamps are placed on the duodenum and it is excised. Fifth, one half of the button is then placed in the end of the duodenum and the other half in the posterior wall of the stomach, one inch from the line of suture, and pressed together. We had four operations of this kind reported, with three recoveries. In all of the latter the button passed on through the duodenum. The first case was that of Dr. A. H. Ferguson, operated on on July 25th, 1893. The patient is still living and in excellent health, having gained sixty pounds in weight. The second case was that of Dr. Willy Meyer's. The patient died several months after the operation. The third case died five days after operation. The patient was in an extremely emaciated condition, and though the operation lasted only forty minutes, he was in a critical state all the time until he died. The fourth case was reported by Dr. M. H. Everett, Lincoln, Nebraska. The patient, a male, aged thirty-five years, first complained of stomach trouble eleven years ago. He had never been free from pain since. Five years ago he commenced to vomit, and during the five years he had not passed a day without vomiting. He came under my charge in November, 1894. His stomach was very much distended and there was a tumour perceptible at the pylorus. An operation was performed on Dec. 18th, 1894. An incision in the median line four inches in length was made; the tumour was drawn out; there were no adhesions; the tumour was as large as a small turkey egg. The mesentery was ligated and divided. The stomach was incised one inch from the growth, and a Czerny-Lembert suture used; the duodenum was divided one inch from the growth; an incision in the posterior wall of the stomach was made and the duodenum joined to it with the button; certainly not five minutes were spent in making the anastomosis; the abdomen was closed without drainage. The temperature next day was 99° F. for a few hours, after which time it remained normal. The button was passed fourteen days after operation. A wonderful change is noticeable in the man. He has not vomited; his appetite is enormous; and at this day, twenty-two days after operation, he has gained twenty pounds. The tumour was found to be a fibroma.

CHOLECYSTDUODENOSTOMY.

The operation of cholecystduodenostomy by this method and the results are most satisfactory. We have 38 operations reported for cholelithiasis, with 37 recoveries and 1 death. The patient lived for seven days following the operation. There was continuous hæmorrhage from the laceration of the liver from the separated adhesions. A large quantity of blood was found in the peritoneal cavity post mortem; a perfect union existed between the bowel and the gall-bladder, and there was no peritonitis. These results were obtained by twenty-two different operators. In my first article on this subject I recommended the removal of only a sufficient number of gall-stones to allow of the insertion of the button. I early abandoned this method, as I saw that it was possible for calculi to remain in the diverticula of the gall-bladder after the button had passed. That this was well grounded was shown in a case referred to me by Dr. J. H Hoelscher. Two years after the operation she was again attacked with colic in the region of the gall-bladder. A cholecystostomy was performed, and two large calculi were found in a pocket at the upper end of the cystic duct. The gall-bladder from the fundus down to the calculi, a distance of two inches and a half, had contracted to a tube about the diameter of a lead pencil. The stones were crushed and removed. The patient made an excellent recovery. This is the only case in which there was a recurrence of the symptoms after the operation, and supports the view advanced by me in my original article that the gall-bladder would contract to a tube, and that the opening between the gall-bladder and the intestine would become so small by the contraction of the gall-bladder that it would not admit fæces into the tract. We have had no case of infection of the liver or gall tracts reported as a result of the operation. Failure of union has not occurred in a single case. This is a most striking contrast in this particular to the results obtained with the suture. The theoretical objection expressed that the button might drop into the gall-bladder and be retained there has not been supported by a single case. The danger of hæmorrhage in patients suffering from cholæmia is very great; and the greatest precaution should be exercised in lacerating adhesions in this class of cases, as the hæmorrhage may continue for days and even weeks. The operation of cholecystenterostomy for malignant disease was very unsatisfactory, as there were eight performed with seven deaths. Two died from shock; one from twisting of the small intestine, producing a volvulus before making the approximation. In one case the gall-bladder was so friable from malignant disease that it tore when the sutures were inserted, and after the button was placed in position and the abdomen closed the friable wall gave way and peritonitis ensued. In all of the others the approximations were found perfect on post-mortem examination. While the mortality from the operation is great, not one of the deaths could have been attributed to the method. Still, they all tend to show that the operation for malignant disease is not a justifiable one; and in many of my recent exploratory operations, when I have found a large carcinoma in the pancreas, duct, or neck of the gall-bladder, I have abandoned the operation, and all of the patients have survived the exploration. Cholecystenterostomy is contraindicated in gangrene of the gall-bladder. These cases should be opened and drained externally, and the peritoneum thoroughly protected by packing. The indications for the operation of cholecystenterostomy are: (1) obstruction to the common duct; (2) obstruction to the cystic duct, where cholecystectomy is impracticable; (3) chronic cholecystitis, with thickening of the wall of the gall-bladder; (4) fistula of the gall-bladder where the patient is emaciated from the loss of bile; and (5) carcinoma of head of the pancreas in its early stage.

INTESTINAL APPROXIMATION.

It is in this field that the button has been of the greatest practical value. The pathological conditions demanding its use in this class of cases greatly endanger the life of the patient. The cases may be well classified as follows:—(1) Resection of the bowel for gangrene: (*a*) for internal obstruction, and (*b*) for hernia; (2) resection of bowel for cure of fæcal fistula; (3) resection for malignant growths; (4) resection for perforations of intestine, both traumatic and pathological; and (5) resection of the rectum. Of the resections for gangrene of the bowel from internal obstruction we have 14 cases with 1 death. The patient was a child that had suffered from a four weeks' obstruction; she was so weak and emaciated when operated upon that she never rallied, and died in twenty-four hours. Of the resections for gangrenous hernia there were 12 cases with 2 deaths. The first case died forty-eight hours after an operation for strangulated umbilical hernia which had perforated into the abdomen; general septic peritonitis existed at the time of the operation. The necropsy showed continuation of peritonitis, perfect approximation, and the button in position. The second case was a very interesting one, the patient having had a congenital hydrocele of the testicle with an inguinal hernia in a separate sac. The sac of the hydrocele connected with the sac of the hernia at its neck. The patient after a severe exertion found his hernia down and painful. It was reduced in the usual manner, but the pain and vomiting continued. Six days after the obstruction occurred he was brought to me by Dr. Hanna of Winfield, Iowa, who had seen him only a few hours before and made the diagnosis. I found the hernial sac free and empty, but a Littré involving four-fifths of the circumference of the bowel was strangulated in the small opening of the hydrocele sac. This knuckle had perforated into the sac, and the lining of the sac was gangrenous from the infection. A resection of five inches of intestine was made with an end-to-end approximation, the approximated intestine returned, and the abdomen dressed open. The patient's bowels moved six times within the next eight hours. He did not vomit, but his pulse increased in

OPERATIONS ON THE INTESTINES WITH THE MURPHY BUTTON.

TABLE I.—RESECTION, END-TO-END APPROXIMATION.

No.	Date.	Operator.	Diagnosis.	Operation.	Recovery.	Death.	Remarks.
1	Dec. 8, '92	Walker	Strangulated hernia	Resection of intestine, 4 in.	1	—	First end-to-end approximation by button Oct. 21, 1893. Patient in perfect health.
2	April 3, '93	Andrews, E. W.	Femoral hernia, gangrene	Resection of intestine, 18 in.	1	—	Nov. 21, patient in perfect health.
3	June 5, '93	Murphy	Intestinal strangulation	Resection of intestine, 2 in.	1	—	Time for approximation five minutes and a half.
4	July 10, '93	Murphy	Umbilical hernia, gangrene, peritonitis	Resection of intestine, 5 in.	—	1	Forty-eight hours' continued peritonitis; perfect approximation.
5	Oct. 17, '93	Ruth	Tumour of cæcum	Resection of cæcum and colon, 2 in.	1	—	Nov. 15, excellent health; obstruction six months; child six years.
6	Nov. 12, '93	Bouffier	Femoral hernia, five days' obstruction	Resection of intestine, 4 in.	1	—	Time four minutes and a half.
7	March 25, '93	Sutton	Closure of artificial anus without resection.	Lateral anastomosis	1	—	Aug. 20, excellent health.
8	Sept. 10, '93	Murphy	Fæcal fistula	Lateral anastomosis without resection	1	—	Time six minutes; Oct. 24, well; fistula closed.
9	'93	Rogers	Inguinal hernia, gangrene	Resection of intestine, 10 in.	1	—	Button passed seventh day.
10	Sept. 23, '93	Murphy	Fæcal fistula	Lateral anastomosis	1	—	Time seven minutes.
11	July, '93	McCall	Fæcal fistula, gangrene	Lateral anastomosis	1	—	——
12	Oct., '93	Marcy	Cancer of rectum	Resection of rectum, 4 in.	1	—	Discharged twentieth day.
13	Nov. 16, '93	Cordier, A. H.	Cicatricial band of ileum	Entero-enterostomy	1	—	——
14	July 8, '93	Bacon	Stricture of rectum	Bacon's operation on rectum	1	—	May 31st, good calibre; neither pain nor discharge; rectum soft and pliable.
15	Jan. 14, '93	Murphy	Annular stricture of rectum	Application of button	1	—	——
16	Sept., '93	Beck, C.	Carcinoma of pylorus	Maydl's operation	1	—	Died subsequently from cancer; post mortem perfect union where button was used; no peritoneal adhesion.
17	Dec. 11, '93	Ferguson	Cancer of cæcum	Resection of cæcum	1	—	——
18	Feb., '93	Beck, C.	Fæcal fistula	Duod-jejunostomy	1	—	Button passed twentieth day.
19	Jan. 14, '94	Ferguson	Fæcal fistula	Resection of ileum	1	—	Button passed sixteenth day.
20	Jan. 30, '93	Keen, W. W.	Carcinoma of hepatic flexure of colon	Ileo-colostomy	1	—	Death forty-seven days later; ulcer of ascending colon; perforation.
21	Feb. 3, '94	Price, J.	Sarcoma of sigmoid flexure	Resection, 6 in. of sigmoid	1	—	Button passed ninth day.
22	Feb. 24, '94	Meyer, W.	Carcinoma of pylorus	Pylorectomy	1	—	Button voided twenty-first day.
23	March 3, '94	Meyer, W.	Sarcoma of ileum	Resection, 15 in. of ileum	1	—	——
24	Jan. 2, '94	Dodge, W. T.	Fæcal fistula	Resection, 3 in. of ileum	1	—	Button voided eighth day.
25	Feb. 16, '94	Dodge, W. T.	Fæcal fistula	Resection, 3 in. of colon	1	—	Button passed eighth day.
26	May, '94	Dodge, W. T.	Ileum adherent to ovarian cyst	Resection of ileum	1	—	Patient died eleven days later from complication; union perfect; button found in rectum.
27	*Jan. 15, '94	Lane, W. A.	Sarcoma of meso-sigmoid	Resection, 12 in. of colon	1	—	Button voided on eighth day.
28	May 9, '94	Bryant, J. D.	Fæcal fistula (had five previous operations)	Ileo-colostomy	1	—	Oblong button used for first time; passed on fifteenth day.
29	May 14, '94	Shrady, G. F.	Fæcal fistula	Lateral approximation	1	—	——
30	Feb. 12, '94	McBurney, C.	Tumour of cæcum	Ileo-colostomy	—	—	Infection occurred; see details in history.
31	April 27, '94	Abbe	Carcinoma of colon	Lateral anastomosis	1	—	Growth to be resected.
32	Dec. 12, '93	McBurney & Murphy	Fæcal fistula	Lateral approximation	1	—	Button passed on ninth day through fistula.
33	April 1, '94	Davis	Adherent ovarian cyst	Entero-enterostomy	1	—	——
34	Feb. 28, '94	McLaren	Strangulated hernia	Entero-enterostomy	1	—	Six inches of sigmoid removed.
35	Nov. 11, '93	Ricketts	Carcinoma of ileum, obstruction	Resection, end to end	—	1	Time for operation ten minutes; death from shock in ten hours.
36	Jan. 29, '94	Middleton, W. D.	Carcinoma of rectum	Resection of upper part of rectum	1	—	Resection, 2½ in.; completely cured; button passed on twelfth day.
37	Feb. 27, '94	Ferguson, A. H.	Cancer of cæcum	Extirpation of cæcum, 14 in. of bowel	1	—	Death four weeks later, diarrhœa; necropsy—perfect approximation; opening large as button.
38	Feb. 27, '94	Stewart, W. W.	Gangrenous hernia	Resection, 10 in. small	1	—	Patient in extreme condition; button passed thirteenth day; rapid convalescence.
39	March, '94	Reed, Chas. A. L.	Carcinoma of cæcum	Resection of part of cæcum	1	—	Button passed twenty-second day.
40	March, '94	Copeland	—	Resection	1	—	——
41	April 2, '94	Newton	Neoplasm of mesentery	Resection, end to end	1	—	Button passed fourteenth day; patient small child.
42	April 7, '94	Dennis	Strangulated hernia	Resection of ileum	1	—	Button passed twenty-second day; wound suppurated; fæcal fistula closed twenty-seventh day.
43	May 11, '94	Outerbridge	Carcinoma of transverse colon	Resection, end to end	1	—	Time for operation one hour forty-five minutes; several inches of transverse colon resected.
44	May 12, '94	Meyer, W.	Intussusception, myxo-sarcoma	Resection of ileum, 3 in.	1	—	Button passed eleventh day; perfect recovery.
45	June 1, '94	Cobb, J. O.	Syphilitic stricture	Anastomosis around stricture	1	—	Died fourteen days after, pneumonia; anastomosis perfect.
46	June 4, '94	Murphy, J. B.	Fæcal fistula	Resection, end to end	1	—	25 in. of small intestine removed. Opening made by button in previous operation dilated from 3½ to 5 in.
47	June 13, '94	Shimoneck, F.	Strangulated hernia	Resection, end anastomosis	1	—	Button passed on eighteenth day.
48	June 15, '94	McCallum, J. L.	Strangulation of ileum	Resection, end to end	1	—	12 inches of ileum resected.
49	June 16, '94	Meyer, W.	Intestinal obstruction, sarcoma, intussusception	Resect on. ascending colon, 12 in.	1	—	Button passed eleventh day; discharged July 24th; died of marasmus Aug. 14th, 1894; necropsy, multiple sarcoma.
50	June 17, '94	Davis, F. A.	Penetrating wound of abdomen, laceration of intestine	Resection, end to end	—	1	Patient never rallied from shock caused by injury, and died in three hours.
51	June 18, '94	Lilienthal	Carcinoma of transverse colon	Resection, 6 in. transverse colon	1	—	Button used 1¾ in. in diameter; passed eighteenth day without pain.
52	June 21, '94	Cochems, F. W.	Strangulated hernia	Resection, end to end	1	—	Resection of 26 in.; button passed 180 hours after operation.

OPERATIONS ON THE INTESTINES WITH THE MURPHY BUTTON—*continued*.

TABLE I.—RESECTION, END-TO-END APPROXIMATION—*continued*.

No.	Date.	Operator.	Diagnosis.	Operation.	Recovery.	Death.	Remarks.
53	June 23, '94	Meyer, W.	Carcinoma of rectum	Resection of rectum 8 in., Kraske Rehn	1	—	Death July 22; gangrene of lower end of sigmoid with fæcal fistula above line of union; button accomplished purpose admirably.
54	June, '94	Cushing, W. E.	Malignant uterine myoma	Resection, 6 in. descending colon	1	—	Six inches of descending colon embedded in tumour resected with it.
55	Aug. 31, '94	Beck, C.	Carcinoma of cæcum	Resection of cæcum	1	—	Ends of intestine sutured; lateral anastomosis with button No. 3.
56	Sept. 9, '94	Jones, W. B.	Malignant stricture of sigmoid	Resection, 3 in. of sigmoid	—	1	Death five days after operation of peritonitis. No effort at union from infection.
57	Sept. 13, '94	Davis, T. A.	Fæcal fistula	Resection, 4 in. of small intestine	1	—	Fistula from gangrenous hernia.
58	Sept. 14, '94	Peck, G.	Appendicitis—adhesions	Resection, 4 in. of small intestine	1	—	Obstruction, after operation for appendicitis, from adhesions.
59	Sept. 13, '94	Parkhill, C.	Fæcal fistula (appendicitis)	Resection of ileum	1	—	End of ileum cut off from cæcum and attached higher up.
60	July 15, '94	Beaver, D.	Gangrenous hernia—fistula	Resection of 3 in.	1	—	Button passed on seventeenth day; temperature never reached 100° F.
61	Oct. 16, '94	Carpenter, J. G.	Intestinal obstruction	Resection, late anastomosis around stricture	1	—	Patient died on eighth day of angina pectoris; bowels moved four times in first twenty-four hours, and continued to move regularly.
62	Oct. 23, '94	Peck, G.	Intestinal obstruction	Resection, 6 in. of sigmoid	1	—	The contraction was produced by adhesions and a fæcal fistula following an operation for pyosalpinx two years previously.
63	† Sept. 27, '94	Swain, P.	Intestinal obstruction	Resection, 5 in. of ileum	1	—	Obstruction existed a long time; proximate end 12 in.; distal contracted; button voided tenth day.
64	Oct. 25, '94	Mullins, C. D.	Intestinal obstruction, four months' standing	Anastomosis of ileum and colon	—	1	Child in extreme condition when operated on, having had four weeks of intestinal obstruction; death in twenty-four hours.
65	July 5, '94	Day, Donald D.	Intestinal stricture	Resection, 10 in.	1	—	Button voided in two months, producing no unpleasant symptoms; bowels moved regularly from time of operation.
66	Aug. 7, '94	Williams, R. R.	Double rupture of intestine, traumatic	Resection (double)	1	—	Both buttons voided eighteen days; patient died from extensive laceration of bladder.
67	July 11, '94	Abbe, R.	Ileo-colic anastomosis	Resection of caput coli	—	1	Patient died from obstruction by hardened fæces in button, notwithstanding ileostomy.
68	June 9, '94	Summers, J. E.	Intestinal obstruction (five days) by malignant growth of sigmoid	Anastomosis around tumour	—	1	Patient in extreme condition; resection not deemed advisable: anastomosis made in ten minutes; death from shock in twenty-five hours.
69	June 13, '94	Summers, J.	Tuberculosis of tube involving sigmoid	Removal of tube, resection of 5 in. of sigmoid	1	—	Tuberculosis involved 4 in. of sigmoid; perfect recovery.
70	June, '94	Hartmann	Ileo-cæcal inflammatory adhesions	Resection of cæcum	1	—	Resection of adherent ileum, cæcum, and colon.
71	June 1, '94	Abbe, R.	Cancer of descending colon.	Resection of growth and loop of intestines	—	1	A special large size button 1¼ in. in diameter used; fitted intestine snugly; sloughing of bowel over button due, I fear, to tension and pressure of metal on account of large size and weight; button from former anastomosis in some cases found resting in loop close to growth; caused no inconvenience (April 27th, 1894); death from peritonitis.
72	Nov. 24, '94	Murphy, J. B.	Gangrenous femoral hernia, four days	Resection, 8 in. of ileum	1	—	A sac full of fæces; bowel ruptured; resection to sound tissue; drained; four bowel movements in six hours; perfect recovery.
73	July 19, '94	Bell, J.	Intestinal obstruction; perforation; adhesions	Resection, 4 in. of small intestine	1	—	Bowel ulcerated; perforation sutured; abdomen closed; recovery; tumour not removed.
74	Sept. 11, '94	Bell, J.	Intestinal obstruction; tumour involving bowel	Resection, 3 in. of sigmoid with tumour (cancer)	—	1	First button found free in splenic flexure above the obstruction, caused no trouble; sigmoid and tumour resected; time two hours; elastic tube used to prevent escape of fæces; operation difficult; death four days later; ends of bowels both gangrenous in whole circumference; perforation had taken place just beyond the border of the button; fatal peritonitis.
75	Oct. 18, '94	Bell, J.	Femoral hernia; gangrene	Resection, 11 in. of ileum	1	—	Sac contained effusive bloody serum; second resection necessary; abdomen closed and radical cure made; perfect recovery; primary union; button voided tenth day.
76	Nov. 1, '94	Murphy, J.	Ileus	Resection, 4 in. of small intestine	1	—	The intestine was bound down by a band of fibrous tissue; resection; button passed twenty-first day; recovery.
77	Oct. 15, '94	Ullmann	Cancer of cæcum	Resection, 26 in.	1	—	Patient made an excellent recovery and was exhibited before Medical Society six weeks after operation.
78	Dec. 18, '94	Everett, M. H.	Tumour of pylorus	Resection, 4 in. of stomach, 2½ in. duodenum	1	—	Button passed thirteen days after operation; uneventful recovery.
79	Dec. 30, '94	Murphy, J. B.	Strangulated inguinal hernia; six days	Resection, 5 in. of small intestine	—	1	Bowel gangrenous, perforated; congenital hydrocele sac full of pus; large quantity of serum in peritoneal cavity; bowels moved six times in first twenty-four hours; pulse increased continuously in frequency; delirium; no vomiting; death from sapræmia in thirty hours.
80	Nov. 7, '93	Griffith, J. D	Rupture of intestine, septic peritonitis	Resection, 5 in.	—	1	Gas and fæces passed off freely through the bowel; death in twelve hours from sepsis and shock.
81	Dec. 18, '93	Griffith, J. D	Stenosis, ileo-cæcal	Ileo-colostomy	1	—	Button passed twenty-first day.
82	Mar. 20, '94	Griffith, J. D	Gunshot wound of large intestine	Resection	—	1	Death sixty hours after operation from obstruction by adhesions of intestines in a sharp angle at seat of operation, producing obstruction.
83	July 7, '94	Wiggins, F. W.	Double perforation, traumatic	Double anastomosis	—	1	Line of union in both places barely visible; pressure, atrophy almost complete at seat of adhesions, where adherent bowels protected line of union.
84	Aug. 16, '94	Meyer, W.	Fæcal fistula	Ileo-colostomy	1	—	Oblong button used in this case, which passed on tenth day without pain or difficulty.
85	Sept. 30, '94	Wittwer, H. R.	Carcinoma of pylorus	Pylorectomy	—	1	Time consumed in operation forty minutes; death from exhaustion fifth day. Necropsy—peritoneum dry; no peritonitis; firm union of end of duodenum to posterior wall of stomach; button still in position; stomach very much contracted and full of cherry pips, lima beans, and grape seeds, many of them had passed through button.
86	Oct. 24, '94	Plettner, A	Carcinoma of cæcum	Resection of cæcum	1	—	Button passed on fourteenth day without being noticed by patient; discharged on twenty-first day.
87	Oct., '94	Reeve, J. C.	Fæcal fistula (hernia)	Lateral approximation	1	—	Button voided on fifteenth day; uneventful convalescence; rapid improvement in condition.
88	Sept. 20, '94	Bacon, M. W., & Cory, A. L.	Pyosalpinx tubes adherent	Resection of transverse colon, 8 in.	—	—	Button voided on eighth day; uneventful recovery.
89	July 1, '94	Davis, T. A.	Fæcal fistula from hernia	Resection, 4 in.	1	—	Button voided on twentieth day; uneventful recovery.
90	Nov. 9, '94	Lee, E. H.	Gunshot wound of abdomen	Resection, double	—	1	Two large perforations of large mesenteric arteries, very profuse hæmorrhage; twelve perforations of bowel; two resections of about 12 in.; time of operation forty-seven minutes; patient exsanguinated. Necropsy—no peritonitis; perfect approximations; death thirty-six hours after operation from shock and hæmorrhage.
91	Jan. 18, '95	Fenger, C.	Obstruction of ileum after appendicitis	Anastomosis around obstruction	1	—	Adhesions so extensive could not be liberated, and lateral approximation considered best.

† THE LANCET, Oct. 20th, 1894.

OPERATIONS ON THE INTESTINES WITH THE MURPHY BUTTON—*continued.*

TABLE II.—CHOLECYSTENTEROSTOMIES IN NON-MALIGNANT CASES.

No.	Date.	Operator.	Diagnosis.	Operation.	Recovery.	Death.	Remarks.
1	June 11, '92	Murphy, J. B.	Cholelithiasis	Cholecystoduodenostomy	1	—	—
2	Oct. 19, '92	Murphy, J. B.	Cholelithiasis	,,	1	—	—
3	Nov. 23, '92	Murphy, J. B.	Cholelithiasis	,,	1	—	—
4	Dec. 18, '92	Murphy, J. B.	Cholelithiasis	,,	1	—	—
5	Jan. 31, '93	Lee	Cholelithiasis	,,	1	—	—
6	Feb. 20, '93	Murphy, J. B.	Cholelithiasis	,,	1	—	—
7	April 6, '93	Mayo	Obstruction of common duct	,,	1	—	Patient seventy-one years old.
8	April 28, '93	Foster, W. D.	Gall-bladder fistula, obstruction of common duct	,,	1	—	Fistula closed without operation.
9	May 6, '93	Murphy, J. B.	Cholelithiasis, occlusion of common duct	,,	1	—	—
10	May 22, '93	Murphy, J. B.	Cholecystitis, impaction	,,	1	—	—
11	June 1, '93	Fabrique	Hepatic colic, impaction	,,	1	—	—
12	June 1, '93	Rogers	Closure of biliary fistula after cholecystotomy	,,	1	—	Tenth day removed button through fistula.
13	July 18, '93	Hartmann	Cholelithiasis	,,	1	—	—
14	Aug. 5, '93	Ferguson	Dropsy of gall-bladder	,,	1	—	—
15	Sept. 20, '93	Lane, W. A.	Cholelithiasis	,,	1	—	—
16	Oct. 20, '93	Luken	Cholelithiasis, obstruction of common duct	,,	1	—	—
17	Oct. 26, '93	Hartmann	Cholelithiasis, obstruction of cystic duct	,,	1	—	—
18	Nov. 7, '93	Murphy, J. B.	Cholelithiasis	,,	1	—	—
19	Jan. 6, '94	Dunn	Cholelithiasis, obstruction of common duct	,,	1	—	—
20	Feb. 13, '94	Murphy, J. B.	Cholelithiasis	,,	1	—	Button passed eighteenth day with twenty-six stones. Two ¾-in. stones removed.
21	Feb. 24, '94	Abbe	Obstruction of common duct	,,	1	—	—
22	Feb., '94	Barrows	Biliary fistulas	,,	1	—	—
23	Oct. 16, '93	Ferguson, A. H.	Gall-stones	,,	1	—	Excellent recovery.
24	Feb. 6, '94	Moffat, H.	Cholelithiasis after cholecystostomy	,,	1	—	Previous cholecystostomy Nov., '93 14 calculi removed; symptoms returned and cholecystenterostomy.
25	Feb. 22, '94	Ferguson, A. H.	Gall-stones	,,	1	—	Excellent recovery.
26	March, '94	Bradley	Obstruction of common duct	,,	—	1	Post mortem, profuse hæmorrhage from liver where it had been torn during operation in freeing adhesions. Approximation perfect. Time of operation forty minutes. Death from exhaustion on seventh day.
27	March 23, '94	Ferguson, A. H.	Gall-stones	,,	1	—	Excellent recovery.
28	April 17, '94	Mynter	Cholelithiasis, enlarged gall-bladder	,,	1	—	Rapid recovery. Button passed twenty-second day—126 gall-stones.
29	May, '94	Bradley	Cholelithiasis, dilatation of gall-bladder	,,	1	—	150 calculi. Button passed forty days after operation.
30	May 16, '94	Parkhill, C.	Gall-stones	,,	1	—	Button passed twenty-second day. Convalescence uneventful.
31	July 26, '94	Burdick, G. G.	Cholelithiasis	,,	1	—	Button passed fourteenth day. Large calculus allowed to remain in choledochus.
32	Aug. 17, '94	Middleton, W. D.	Cholelithiasis, obstruction of choledochus	,,	1	—	Gall-bladder found contracted to size of hickory nut; stone half that size removed; obstruction due to fibroid degeneration along entire length of duct. Smallest size button used; rapid convalescence.
33	Sept. 8, '94	Murphy, J. B.	Cholelithiasis, obstruction of cystic duct	,,	1	—	Time of operation twenty minutes. Difficulty in pressing calculus from duct back into bladder; 60 calculi removed.
34	Sept. 15, '94	Murphy, J. B.	Cholelithiasis, obstruction of cystic duct	,,	1	—	Gall-stones as large as filberts impacted in cystic duct removed through gall-bladder, which was full of mucus; no bile; patient never had jaundice or colic. Time of removing calculus and making anastomosis six minutes; time of entire operation sixteen minutes.
35	Sept. 15, '94	Werder, X. O.	Cholelithiasis	Cholecystjejunostomy, closure of fistula	1	—	Button passed twenty-seventh day.
36	Nov., '94	Murphy, J. B.	Cholelithiasis, cholecystitis	Cholecystjejunostomy	1	—	A pure cholesterine calculus ⅝ in. in diameter removed. Button passed eighteenth day, after vomiting. Largest size button used.
37	—	Johnson, G. B. / Long, J. W.	Cholelithiasis, occlusion of common duct	Cholecystduodenostomy	1	—	Gall-bladder firmly adhered to colon; Paquelin cautery used for hæmorrhage; gall-stones removed; button passed nineteenth day with two stones. Uninterrupted recovery.
38	Nov. 11, '94	Morris, E. V. D.	Cholelithiasis, enlarged gall-bladder	Cholecystenterostomy	1	—	8 ounces of bile in gall-bladder; time thirty minutes; discharged from hospital in sixteen days; button voided in eleven days.
39	Jan. 14, '95	Lindsey, C.	Cholelithiasis, cholecystostomy, fistula	Cholecystenterostomy	1	—	Fistula continued discharging after cholecystostomy, Aug. 4th. Operation with button thirty minutes; uneventful convalescence.

OPERATIONS ON THE INTESTINES WITH THE MURPHY BUTTON—*continued*.

TABLE III.—CHOLECYSTENTEROSTOMIES IN MALIGNANT CASES.

No.	Date.	Operator.	Diagnosis.	Operation.	Recovery.	Death.	Remarks.
1	March, '93	Weir	Cancer of pancreas, liver, omentum, and gall-ducts	Cholecystentero-stomy	—	1	Exhaustion; perfect approximation.
2	May, '93	Murphy, J. B.	Cancer of duodenum, pancreas, gall-ducts, and liver	Cholecystojejuno-stomy	—	1	Four days; ileus from volvulus; loop of jejunum twisted upon itself.
3	Feb. 2, '94	King, E. W.	Carcinoma of pancreas	Cholecystduode-nostomy	—	1	No peritonitis; cholæmic hæmorrhage from all mucous surfaces of the body; death on fourth day.
4	March, '94	Mynter	Stenosis of common duct	Cholecystduode-nostomy	—	1	No peritonitis; perfect adhesions; multiple carcinoma of pancreas and liver; death from prostration.
5	Sept. 24, '94	Hartley, F.	Malignant obstruction of common duct	Cholecystcolo-stomy	1	—	Button passed.
6	Jan., '95.	Dawbarn, R. H. M.	Cholelithiasis	Cholecystduode-nostomy	—	1	It was found on introducing the suture that a carcinoma of the gall-bladder as well as gall-stones existed. When the sutures were introduced they tore through the cancerous wall as if it were wet paper; the smallest sized button was finally placed and the intestine approximated; death from septic peritonitis; necropsy showed the friable gall-bladder gave way from the clasp of the button. As far as I can learn this was the first time the button was used in New York. Dr. Dawbarn comments: "This case should not count against the method for the reasons mentioned; I have repeatedly demonstrated upon the cadaver that the operation is simplicity itself."
7	Feb. 27, '93	Griffith, J. D.	Cholelithiasis, cholæmia	Cholecystentero-stomy	—	1	Patient had large hæmorrhagic spots all over body at time of operation; necropsy showed large extravasations throughout entire intestine track; no peritonitis; death from exhaustion.
8	March 13, '93	Griffith, J. D.	Cholelithiasis, impaction of stone in duct	Cholecystentero-stomy	—	1	Operation greatly prolonged on account of adhesions; connexion to jejunum.

TABLE IV.—GANGRENE OF THE GALL-BLADDER.

1	March 15, '94	Long, J.	Gangrene of gall-bladder	Resection of gangrenous portion; cholecystentero-stomy	—	1	Gall-bladder extensively gangrenous; contained 196 calculi; death in twenty-four hours; temperature reached 106°; sepsis.

TABLE V.—GASTRO-ENTEROSTOMY.

1	Sept., '92	Murphy, J. B.	—	—	1	—	—
2	May, '93	Wiener	—	—	—	—	Four days; continued hæmorrhage from cannula; perfect union.
3	Aug. 9, '92	Murphy, J. B.	—	—	1	—	Seven minutes.
4	June 7, '94	Logan	—	—	1	—	—
5	Dec. 26, '92	Barbat	—	—‡	1	—	Necropsy, forty-six days; perfect union; no contraction.
6	July 25, '92	Ferguson	—	Pylorectomy & gastro-duodenostomy	1	—	Time eighty minutes; Sept. 3 patient in good health.
7	March, '93	Schede	—	Gastro-enterostomy	—	1	Exhaustion; perfect approximation.
8	March, '93	Schede	—	Gastro-enterostomy	1	—	—
9	Feb. 2, '94	Ferrier, M.	—‡	Gastro-enterostomy	—	1	Exhaustion, eighteen hours; perfect union.
10	July 21, '93	Middleton, W. D.	Stricture of pylorus	Gastro-enterostomy	1	—	Uneventful recovery; patient, up to date, has gained 42 pounds.
11	Dec., '93	Reed, Chas. A. L.	Carcinoma of pylorus	Gastro-enterostomy	1	—	Button passed nineteenth day; patient died four months later.
12	April 19, '94	Bressler	Obstruction of pylorus	Gastro-enterostomy	—	1	Death four weeks later; exhaustion; button found at splenic flexure of colon; retained by band of adhesion; no obstruction.
13	April 20, '94	Mynter, H.	Carcinoma of pylorus	Gastro-enterostomy	1	—	Vomiting ceased; patient left hospital in three weeks.
14	May 5, '94	Quenu	Epithelioma of stomach	Gastro-jejunostomy	1	—	Time of operation one hour fifty-five minutes; uneventful recovery; up in eighteen days; great increase in weight.
15	May, '94	Mynter, H.	Carcinoma of pylorus	Gastro-enterostomy	—	1	Smallest size button used, which could not possibly grasp tissue, and was never intended for that purpose; the wall of stomach slipped out of its embrace and allowed contents to escape; death ensued from exhaustion in twelve hours; a running suture is not necessary if proper sized button is used.
16	—, '94	Mynter, H.	Carcinoma of pylorus	Gastro-enterostomy	—	—	—
17	July, '94	Middleton, W. D.	Carcinoma of pylorus	Gastro-enterostomy	—	1	Exhaustion; largest button used; patient very weak and emaciated previously to operation from constant vomiting; death on third day; post mortem was revealed circumscribed peritonitis about site of operation; approximation perfect; stomach eroded by a great ulcer 3 inches in diameter; pancreas and other organs involved.
18	July 6, '94	Meyer, W.	Malignant stricture of pylorus	Gastro-enterostomy	1	—	Rapid recovery.
19	July 4, '94	Mayo, W. J.	Carcinoma of pylorus	Gastro-enterostomy	1	—	Death fourteen days after; broncho-pneumonia; necropsy; perfect union; button liberated; opening twice as large as button.
20	July 23, '94	Meyer, W.	Carcinoma of pylorus	Gastro-enterostomy	1	—	Patient still in hospital, doing well.
21	Sept. 13, '94	Lyman, C. B.	Carcinoma of pylorus	Gastro-enterostomy	—	1	Necropsy; very large carcinoma involving large portion of stomach and duodenum; no peritonitis; perfect approximation; button in position; death from exhaustion on fourth day.
22	Sept. 30, '94	Bryant, E. A.	Carcinoma of pylorus	Gastro-enterostomy	1	—	Button No. 3 (1 inch in diameter) used, which was voided on sixteenth day; no pain, fever, or vomiting after operation.
23	Sept. 26, '94	Jaboulay	Carcinoma of pylorus	Gastro-enterostomy	1	—	Button No. 3 used, which passed on fourteenth day; patient made an excellent recovery.
24	Aug. 23, '94	Case, C. E.	Carcinoma of pylorus	Gastro-jejunostomy	—	1	Necropsy; perfect union at seat of approximation; button still in position; death on seventh day from general suppurative peritonitis.
25	Oct. 12, '93	Griffith, J. D.	Carcinoma of pylorus and duodenum	Gastro-jejunostomy	1	—	Died two weeks later of exhaustion; patient seventy-two years, and very much emaciated.
26	Nov. 10, '93	Griffith, J. D.	Carcinoma of duodenum and liver	Gastro-jejunostomy	—	1	Button not pressed tight enough; one edge loose; death from septic peritonitis.
27	—, '94	Monod	Carcinoma of pylorus	Gastro-enterostomy	1	—	Button voided on twelfth day; Doyeir's procedure approximating intestine to posterior wall of stomach through perforation in transverse mesocolon.
28	Oct., '93	Buecking	Carcinoma of pylorus	Gastro-enterostomy	1	—	Time for operation sixteen minutes; patient died some time after of exhaustion; necropsy showed a perfect union.

‡ Dr. Murphy's table omits the diagnosis of these nine cases and the operation in the first five.

frequency, and he died thirty hours after the operation with all of the symptoms of auto-intoxication from the decomposing proteids that had been retained in the alimentary canal. There was no peritonitis. This case shows how important it is to act upon the symptoms of obstruction following an apparently complete reduction of a hernia. Of resections for fæcal fistula with end-to-end approximation I have had nine cases reported, all of which recovered. Here the results show that the operation of resection with end-to-end approximation promises much more for the patient than the lateral approximation both for the immediate relief of the fistula and the permanent cure, and I now perform it in all cases in preference to the lateral. We have a total of 41 resections for non-malignant diseases, with 2 deaths. If to these be added the seven cases by Dr. Joseph Price, the details of which I have not received, with six recoveries, we have a total of 48 cases with 3 deaths. The first death was due to continued peritonitis and the second to auto-intoxication. In Dr. Price's case the death occurred from shock twelve hours after operation. The operation was the removal of an enormous universally adherent fibroid, also the excision of several inches of the bowel and a portion of one ureter. These results, obtained in the hands of many operators, certainly indicate that the question of operation in gangrenous hernia, internal obstruction, and fæcal fistula is definitely settled—i.e., that resection with end-to-end approximation gives all that can be expected in the way of results.

Resection of the intestine for malignant disease with end-to-end approximation does not give us as good results as for non-malignant, as is the case with all operations for malignant disease. Still, when we review and analyse them, they are a great improvement over those obtained by other methods, and on the whole very satisfactory. There were 30 operations with 7 deaths. These include 3 resections of the cæcum with one death. The causes of death in the malignant cases were as follows. In one case infection from without during operation; a perfect approximation was found at the necropsy. One case from shock ten hours after operation. One case from peritonitis. The specimen showed that there was no evidence of effort at union at the seat of approximation, and that the peritonitis was present from the time of operation. In one case which died from peritonitis a special large-size button (one inch and a half in diameter) was used; it fitted the intestine too tightly and produced a sloughing over the surface of the button with perforation. It is important that the button should fit easily in the intestine. One case had fatal peritonitis. The gangrene of both ends of the bowel was attributed to the length of time that the ends were compressed during the operation, and this conclusion is certainly supported by the fact that both ends were gangrenous and that the perforation occurred not at the seat of the pressure atrophy, but beyond the margin of the button. The intestinal clamps which I use on the intestine to prevent the escape of fæces and gas cannot produce this condition, as they do not compress the parallel artery of the bowel in the triangle made up by the division of the peritoneal surfaces of the mesentery and the wall of the bowel. This artery is the most important one for the nutrition of the bowel. In one case death occurred shortly after operation, but the cause was not reported. Finally, one case died from exhaustion. Resection for perforations of intestine, traumatic and pathological, with end-to-end approximation. The mortality from perforations, both from gunshot wounds and for perforating ulcers, has alway been very great, not that the danger exists in the operation, but in the dangers of the pathological conditions themselves. Luche, in his collection of 322 cases, found that where the operation was performed within twelve hours after the perforation the mortality was 58·2 per cent.; later than twelve hours, 79·5 per cent. In bullet wounds of the abdomen the collapsed condition of the patient, the profuse hæmorrhage, and the shock upon the nervous system all contribute very greatly to the mortality. We can estimate with great accuracy the position of the wound in the bowel by calculating the course of the bullet from the point of entrance to the position in which it is lodged. The bullet commonly passes either (1) from before backwards, in which case we have one or two perforations, or (2) transversely, then we have many perforations in close proximity—i.e., we may have as many as ten or twelve perforations within twenty inches of intestine. The operation should be a resection of the entire perforated coil, an end-to-end approximation, with d a'nage of the cavity. Where the perforations are a greater distance apart double resections may be made and two buttons inserted as in a case reported by Dr. R. R. Williams of Manning, Iowa. The operations for pathological perforation of the intestinal tract are, as a rule, postponed too long. The profession has not yet extricated itself from the erroneous belief that the symptoms of collapse occur immediately after the perforation takes place. I would enunciate the following rule, and it should be impressed on the mind of every practitioner. The manifestations of perforation into the peritoneal cavity depend upon the character and quantity of material admitted into the cavity and the pathological changes produced thereby in the peritoneum. By this I mean that the symptoms are not the result of the perforation *per se*, but the result of the pathological changes produced by the result of the perforation.

LATERAL APPROXIMATION.

In cases of fæcal fistula resection should be performed in preference to lateral apposition; the same is true in cases of malignant disease. In cases of extensive adhesions it may be impracticable to resect, and lateral approximation must be performed. Of lateral approximations 12 were reported: 5 for maligant disease, with 2 deaths, and 7 for simple obstruction; all recovered.

RESECTION OF THE RECTUM.

This operation has been simplified in its most trying mechanical part—i.e., the drawing down and approximating the upper to the lower segment, suturing it there, and still retaining the sphincter intact. We have reported 3 resections with recoveries, and 2 lateral approximations; that is approximations around the strictures with a pressure atrophy of the stricture, a method in which the button is used, devised and described by Dr. Bacon.[1] The operation of resection with removal of the sacrum (Kraske) and end-to-end approximation with the button was first done by Dr. Henry O. Marcy of Boston.[2] The method of procedure for resection of the rectum is as follows:—1. In order to do the operation without removing the coccyx or sacrum (Kraske), it is necessary to be able to reach the upper margin of the carcinoma with the index finger. 2. The sphincter should be dilated until it is completely paralysed; the cancer should be drawn down with forceps, and the rectum packed with gauze above. 3. A puckering string should be inserted in and out through the wall of the rectum half an inch below the carcinoma and left perfectly loose. 4. A circular incision is now made through the entire wall of the rectum, a quarter of an inch above the suture, and between it and the carcinoma. 5. The carcinoma and rectum are then liberated from the surrounding connective tissue, and drawn down as a cylinder into the lower segment of the rectum, and the separation continued until well above the carcinoma. 6. Half an inch above the carcinoma another puckering string is inserted, and a circular incision is made a quarter of an inch below this, cutting out the carcinoma. The gauze packing is then removed. The male portion of the button in which is threaded extremely heavy braided silk, double-drawn through the cylinder, is placed above, and the upper puckering string tied around the cylinder of the button and cut short. The stem is held with a small forceps. 7. Slide the female portion of the button over the string and press it up until it barely catches the end of the male cylinder, just sufficient to hold. 8. Make a small parallel incision in the lower segment of the rectum over the coccyx and half an inch below the first puckering string inserted. Through this pass a strand of iodoform gauze for drainage outside of the button. (This may be removed on the third or fourth day, if necessary.) 9. Draw the button well down and tie the first puckering string around the conjoined cylinders; cut the suture short and press the button together by making traction on the cord and pressing up from below. 10. Have the bowels loose before the operation and keep them loose after the operation until the button loosens itself or can be liberated by slight traction about the tenth day. The traction cords may be left in until the button is removed.

CONCLUSIONS.

1. The cicatrix produced with the button does not contract.

2. Size No. 1, $\frac{3}{4}$ in., or No. 2 $\frac{13}{16}$ in., should be used for cholecystenterostomy. I prefer No. 2.

3. End to end, side to side, and end to side of the small intestines should be made with button No. 3, $\frac{15}{16}$ in. in diameter.

[1] The New York Medical Record, Dec. 10th, 1892.
[2] Medical Record, June 26th, 1894

4. End to end and side to side of large intestine should be made with button No. 4, 1 in. in diameter.

5. A special large size, 1¼ in. in diameter, with a long male cylinder, may be used in some cases of resection of the rectum with advantage, but it should not be used unless it fits loosely.

6. In intestinal obstruction resection with end to end union gives better results than lateral approximation, and should always be performed when practicable. The same operation should always be done in gangrenous hernia. In fæcal fistula the bowel should be resected and united end to end.

7. The patients should receive liquid nourishment as soon as the effect of the anæsthetic passes off. The bowels should be made to move as soon as possible after the operation and frequent evacuations kept up.

8. If the button does not pass in three or four weeks, the rectum should be examined, as it may rest just inside the sphincter.

9. There has been one case reported of occlusion of the button by fæcal impaction in the cylinder. This can be easily avoided by a mild cathartic immediately after operation.

10. When returning the intestines to the abdomen, they should be placed in parallel lines, especially at the seat of approximation, to prevent sharp curves and obstruction. This occurred once with the button; many are reported following suture.

11. There is no danger from obstruction from the button, as not a single case has been reported. This proves that the deductions made by Choput of Paris from experiments on the cadaver are erroneous.

12. There is no danger of extension of the pressure atrophy beyond the line of pressure.

13. Primary adhesion may be hastened in malignant cases by abrading the peritoneum with a needle. It is unnecessary in non-malignant cases.

14. A supporting suture is never necessary to secure union, and should only be used to relieve tension when the viscera approximated are forced out of position.

15. The mucous membrane should be pushed down in the cup of the button before closing it; if redundant it should be trimmed off with the scissors. It should never be allowed to protrude between the edges of the button when the button is closed.

16. While the button is easily inserted, the pathological condition requiring the operation may demand the greatest surgical skill to secure a favourable result.

17. The following points regarding the construction of the button should be noted before using it. (*a*) The spring catches should hold firmly in all positions and should be made of a metal that will not be corroded by acids. (*b*) The elastic pressure cup should be on the male half of the button—never on the female. (*c*) The edges of the pressure surfaces should be very smooth—hemispherical in shape. (*d*) The spring under the pressure cup should not be too strong. (*e*) There have been defective buttons on the market. The following firms are at present manufacturing perfect buttons: J. J. Ryan and Co., Chicago; Truax Greene and Co., Chicago; Geo. Tiemann and Co., New York; W. F. Ford and Co., New York; Down Brothers, London, England; Sharp, Smith and Co., Chicago; Franz, Kratzmuller and Co., Chicago and Berlin.

18. If the button appears at the opening of the fistula after lateral approximation, do not try to force it through the opening—it is unsurgical; open the abdomen and (*a*) press the button back to the anastomotic opening and through the latter on down the intestine, and it will pass; or (*b*) make a longitudinal incision in the bowel and take it out.

THE LINCOLN COUNTY HOSPITAL.—From the 125th annual report of this hospital we learn that the number of patients admitted during the past year was 982, the largest ever admitted since the erection of the institution, and an increase of 142 as compared with those admitted the previous year. Including those remaining as in-patients at the beginning of the year, the total number treated was 1068; of these, 481 were cured, 91 relieved, 319 made out-patients, 32 died, 65 were discharged unrelieved, and 80 remained in hospital at the close of the year. The average length of residence in the hospital of each patient was five weeks, and the weekly cost of maintenance £1 2*s.* 2½*d*, as compared with £1 3*s.* 7*d.* the preceding year. The total number of out-patients was 4093.

MALIGNANT DISEASE OF THE COLON SIMULATING MOVABLE KIDNEY.

BY HENRY MORRIS, M.A., M.B., F.R.C.S. ENG.,
SURGEON TO THE MIDDLESEX HOSPITAL.

CASE 1. *Malignant disease of the ascending colon mistaken for movable kidney and causing a large perinephric abscess.*—On Oct. 20th, 1889, I was asked to see a married woman aged about forty-three years, who was suffering from a large swelling in the right lumbar region which had been treated as a movable kidney for some months previously. She had recently partly recovered from a severe attack of right-sided pleurisy, and had gone to Worthing for change of air; but a few days after her arrival at the seaside she became very ill with fever, rigors, and a rapidly developing swelling of great size in the right side of the abdomen. She was seen by Mr. Augustus H. Collet, who sent her home in an invalid carriage and communicated with me to take charge of the case. When I saw the patient she was in great distress with much fever, shivering, and considerable œdema of the right loin. The whole right side of the abdomen was distended and dull, and in front there could be readily felt a hard movable mass not unlike the kidney, but situated rather lower than the normal position of that organ. I was told that this somewhat reniform mass had been known to exist for several months, that it had been very movable, and had been regarded by a distinguished obstetric physician and by a general physician as a movable kidney. The large general swelling, with pain, sense of fulness, and œdema in the loin, had only made itself evident a few days. I regarded the case as one of perinephric abscess, and advised that it should be immediately opened, but suggested a physician seeing her before the operation, and Dr. Wilks was accordingly called into consultation. Dr. Wilks agreed that an incision should be made through the loin. This was done on the following day. A very large quantity of pus was evacuated, and two enormous pieces of sloughed cellular tissue were withdrawn. These, when spread out, were large enough to cover a full-sized joint dish. The movable mass was felt to be riding upon the front of this abscess, and sank back into the loin after the evacuation of the pus and when the patient was turned upon her back. The abscess soon healed; the patient immediately improved and became convalescent, but there was no appreciable change in the size of the movable mass. On Dec. 26th there was evidence of renewed inflammation in the loin; a fresh abscess formed and burst on the night of Dec. 29th, through the centre of the scar of the incision. The second abscess soon healed, but still the mass remained, and, after another consultation with Dr. Wilks on Jan. 25th, 1890, it was decided to examine this by laparotomy. On Jan. 28th Mr. Norton gave the anæsthetic, and with the assistance of Mr. Andrew Clark and Mr. Leopold Hudson I made an incision in the right semilunar line to explore the tumour. It proved to be a broad, annular, malignant growth in the wall of the ascending colon and cæcum, and though still movable at its anterior surface it was very tightly bound down by adhesions posteriorly, so that for this reason, as well as on account of the extent of the infiltration of the bowel, excision was not deemed advisable. There was no occasion to perform colotomy as there was no intestinal obstruction. On Feb. 5th all the sutures were removed, and the patient was convalescent from the exploratory operation. The subsequent symptoms were pain, occasional constipation, flatulence, and general weakness, and towards the end emaciation, but no intestinal obstruction throughout the illness. She died on August 13th, 1890, somewhat rapidly, and with symptoms suggestive of ulceration and perforation of the bowel.

CASE 2. *Cancer of descending colon simulating movable kidney in front of perinephric abscess.*—A gentleman forty-seven years of age was sent to me by Mr. Court of Staveley on Feb. 1st, 1887, with the following history. During the preceding six months the patient had suffered on and off with a pain in the left ilio-costal space. About four months ago he had an attack of colic, the pain being in front of the abdomen. He had always been temperate. He had lost about two stones in weight during the six months and had become weaker. For some time a hard smooth mass had been felt, on deep pressure, immediately below the ribs, associated with some tenderness on firm pressure on the loin. He had not been equal to

following his employment since Jan. 17th. On Jan. 21st he had a rigor. At the time I saw him there was much pain over the left kidney, extending back into the loin and down towards the groin in front. His temperature was 100° F. and the pulse 94; the respiration was normal. He was thin and haggard-looking; he walked with a limp, and with his trunk bent somewhat forwards and to the left side. There was a well-defined, somewhat movable, hard swelling felt through the front wall of the abdomen in the position of the left kidney. The left loin felt full and hard and was slightly bulged backwards. It was dull on percussion, and the skin, though not actually œdematous, had a look suggesting that it was so. His urine had a specific gravity of 1030; it contained no sugar or albumen, but he had some increased frequency of micturition, getting up at night to urinate. He was very thirsty. Mr. Court wrote: "The lump, whatever it is, I feel persuaded is at the bottom of his trouble. His symptoms rather point to the kidney, but the swelling is hardly in the normal position of that organ. Is there an abscess with irritation transferred down the psoas muscle? or is there a malignant growth? This latter would account for all his symptoms, but I cannot make up my mind what the exact nature of the growth or swelling really is." To me it appeared that Mr. Court's opinion was as near as one could go, and I wrote down in my case-book: "A perinephric abscess in left loin, with tumour in neighbourhood of left kidney." On Feb. 5th the patient came up for an exploratory operation, but by this time the symptoms had somewhat changed. His temperature since I saw him on the 1st had been 103° at night and 101° in the morning. There was more fulness and hardness in the loin. The skin of the loin looked red, and was decidedly œdematous and the loin was very tender. On Feb. 6th, in Mr. Court's presence, I made an incision into the loin, and evacuated a quantity of very offensive pus from a large riddled space behind the kidney, which extended upwards to the diaphragm and downwards to the pelvis. During the convalescence the discharge assumed a fæcal character. The patient returned to Derbyshire on Feb. 22nd with a sinus, which showed marked signs of closing. He did not live long afterwards, however, but died on May 12th, 1887, greatly emaciated. Fæces and pus were again discharged through the fistula, and Mr. Court informs me that at the post-mortem examination he found the descending colon involved in an ulcerated cancerous mass, the left kidney largely destroyed by the same disease, and there were numerous small secondary deposits in the omentum. Both the kidney and colon communicated with the old abscess sac, which was full of fæcal matter.

These two cases show the disposition of malignant disease of the colon to cause widespread suppuration in the cellular tissue of the loin and to present a tumour in the lumbar region, which, especially if it excites any renal irritation, is not unlikely to be regarded as of renal origin, and when movable to simulate movable kidney. I might refer to another case, which I saw with Mr. T. W. Nunn and Mr. Balding of Royston, in which I opened a large perinephric abscess, due, there is every reason to believe, to malignant disease of the sigmoid flexure.

Cavendish-square, W.

THE EYESIGHT OF SCHOOLBOYS IN 1894.

BY A. ST. CLAIR BUXTON, F.R.C.S. EDIN.,
SURGEON TO THE WESTERN OPHTHALMIC HOSPITAL.

FOR some years past I have from time to time called attention to the unsatisfactory condition of eyesight prevalent among children educated in Board schools. Many a time I have pleaded their cause, though, I fear, with but indifferent success. There are still countless numbers of little ones whose eyes are quite unfit for the close work they have to do, and who are compelled to get through their daily routine as best they may. There is still the same ignorance among their elders, who mistake faulty vision for dulness or worse; and there appears to be still the same degree of apathy on the part of the authorities, whose duty it should be to see that those under their charge and control are in every respect fitted and properly equipped for the task they have to accomplish. The House of Commons has had the matter brought to its notice more than once, but as far as I know the only result has been a promise that an investigation should be made in some selected schools. What the upshot of this inquiry was, how it was conducted and by whom, or whether it ever took place, is more than I can tell. Feeling strongly on the subject, and finding no evidence of any improvement in the methods of the Education Department being likely to occur, I have devoted no small portion of my leisure during the year 1894 to an independent inquiry. This has been made among boys of the upper and middle classes in grammar schools, in private educational establishments, and in the course of ordinary practice. And here I would tender my thanks to those masters who have so kindly made my work as easy as the circumstances permitted.

On the whole a fairly large number of boys have been subjectively tested for visual acuity and for manifest astigmatism, with what results the following table will show. It may be taken for granted, without much fear of contradiction, that, whatever be the proportion of imperfect vision existing in the higher classes of society, the proportion is still greater, and probably much greater, in the lower grades. Unhealthy surroundings, badly lighted and badly ventilated rooms, overcrowding, want of proper exercise, insufficient food, &c. conduce largely to this. The facts are bad enough even with well-fed and well-cared-for boys, as my table will show. What must they be in the case of those others whose lot and surroundings are in every way less favourable?

Normal.	Subnormal.				
A	B	C	D	E	F
⅔ and ⅔	⅔ and ⅓	⅔ and less than ⅓	⅓ and ⅓	⅓ and less than ⅔	1/12 and 1/12 or less
Good	Good with 1; fair with 1	Good with 1; bad with 1	Fair with each	Bad	Very bad
Per cent. 63·54	Per cent. 7·22	Per cent. 4·33	Per cent. 7·58	Per cent. 5·05	Per cent. 12·27

It must be remembered that hypermetropia greatly exceeds myopia in frequency of occurrence, and that the subjects of the former kind of refractive error are often not aware that their eyes are in any way at fault until they are troubled by the accommodation beginning to be "fagged out." This happens, for the most part, in young adult life at an age exceeding that of the schoolboys now under consideration; consequently it is highly probable that a good percentage of those boys whose acuity of vision for distant types is shown as normal in my table are really hypermetropes. It would not be an exaggeration to say that at least 10 or 15 per cent. of the so-called normal boys, Class A, will find difficulty in using their eyes for close work before they are twenty years old; so that, roughly speaking, one may say that very little, if anything, more than half the number of boys examined are really normal as regards vision. This statement is further borne out by the following fact. Of all the boys tested (with Snellen's distant types and the astigmatism fan) nearly 15 per cent. were found to be astigmatic with one eye only, and over 17 per cent. with both eyes, many of the boys who showed evidence of this error (either in one eye or in both) being those who had been able to read the six-metre type at the full distance with each eye, and who consequently figure as "Normal," Class A, in my table.

The difference of opinion which seems to prevail between various observers as to whether bad sight is increasing in England or whether it is not might surely, with some advantage to the public, be removed, and the whole matter cleared up by some such plan as I have adopted in the present instance, but on a much larger scale, repeated at stated intervals—say, of three years. Perhaps some of my younger *confrères* with sufficient enthusiasm and with more leisure than I can command may think it worth while to carry out this suggestion. If it should be established beyond dispute not only that the average eyesight of our growing boys and girls is decidedly mediocre, but also that the trouble is on the increase (as I am sure it is), then perhaps something may be done towards remedying the evil. My actual figures from which the table was drawn are: number of boys tested, 2493—i.e., in Class A, 1584; Class B, 180; Class C, 108; Class D, 189; Class E, 126; and Class F, 306. The number of boys astigmatic in one eye was 360, and in both eyes 441.

Upper Wimpole-street, W.

"CANCER HOUSES."

BY A. HAVILAND, M.R.C.S. ENG.

MR. SAMUEL G. SHATTOCK in his Morton Lecture, delivered at the Royal College of Surgeons of England on May 3rd, 1894,[1] after stating that my conclusions, drawn from my collection of statistics in England and Wales, "were that cancer was most prevalent along the courses of rivers which seasonally flood their banks, and especially where, from the flatness of the country, the floods were retained; the districts about the Thames and Severn and Mid-Devon and Yorkshire rivers were especially noteworthy,"[2] went on to remark: "But there were lesser areas where the endemic character was still more highly pronounced. The best of such was that described by Mr. Law Webb in his paper on the Etiology of Cancer.[3] Mr. Shattock then briefly gave an abstract of the cases reported by Mr. Webb, which through his kindness I am enabled to give in full. Mr. T. Law Webb, after referring to my views and my statement "that a study of the Registrar-General's returns shows the existence of 'cancer fields' and 'cancer areas' in this country, and that soil and situation have much to do with the mortality from this disease," adds: "I would go further and suggest that there are 'cancer houses' and cancerous water or water-supplies." "I shall quote," he writes, "a series of cases bearing upon these questions. It will be noted that I assume one cause for all the various forms of carcinoma. This is not postulating too much, for could there be diseases more widely differing from each other clinically than lupus, phthisis pulmonalis, and pulpy disease of a joint, which are all, nevertheless, acknowledged to be due to the presence of a single irritant, the tubercle bacillus? And I fail to see why scirrhus, rodent ulcer, epithelioma, or any other forms of carcinoma may not proceed from one and the same cause, whatever that may prove to be.

"CASE 1.—In a village not two miles from my residence are two houses under one roof, with a drain system and water-supply common to both. I will call these dwellings No. 1 and No. 2. Twenty-six years ago a man aged twenty-eight, living at No. 1, suffered from cancer of the rectum, of which he died. The diagnosis was confirmed by examination post mortem. The house was next occupied by Mr. J. M—— and his wife. This gentleman, aged about sixty, two years after the death of the previous tenant was treated for cancer of the stomach, of which malady he died after three months' illness with constant vomiting. His widow continued to live in the same house, and died ten years later, aged sixty-five, from cancer of the rectum. A mass of tumour substance protruded externally before she died. She was ill about six months. Before her death, however, Mrs. R——, aged fifty, who resided next door at No. 2, was found to be suffering from cancer of the breast, which proved fatal in eight months. After the death of Mr. J. M——'s widow No. 1 was occupied by three maiden ladies. Of these, Miss P—— died four years ago from cancer uteri at the age of fifty-eight. She was assiduously nursed by Miss F——, who also died last winter with all the symptoms of cancer of the stomach; her age was sixty-one. The other lady still survives in fairly good health. None of these people were blood relations, nor can I discover that any of them had a family history of cancer. This is therefore a remarkable sequence of carcinoma cases; and in my limited research into the literature of the subject I have met with nothing like it.

"CASE 2.—In a group of cottages much nearer to my house nine cases of cancer have been treated in the past fifteen years. These dwellings are grouped together and do not occupy much more than an acre of ground. All the inhabitants use water from a certain pump situate by the roadside and close to a filthy hovel. There are twenty houses in all; one cottage enjoying a bad pre-eminence for dirt and discomfort furnished three cases of cancer out of the nine mentioned above. In order to enter this hovel one has to stride across a small cesspool in front of the door-step. Here eight years ago lived an old man with epithelioma of the lower lip. I removed the growth and was disappointed to find that no sooner was the operation wound healed than difficulty in swallowing was noticed, and in about four months he died of malignant stricture of the gullet. His widow continued to live in the same cottage, and so also did a male lodger who had been with the old couple some years. This old fellow, a hardy, healthy looking old man of sixty, working as a road maker, came to me two years ago for the removal of an epithelioma of the lower lip. This I excised, and he remains well so far with no recurrence of the growth. The widow, however, last year consulted me about a sore in the skin of her back over the sacrum, which troubled her greatly. It spread slowly and would not heal. Though it looked more like a patch of lupus than anything else I strongly advised excision. This was eventually done in a thoroughly effectual manner by Mr. Barling, and up to the present time there has been no recurrence. Microscopic examination of the growth leaves no doubt as to its nature, as it has the usual structure of epithelioma. It will be noted that these three cases were not related; nor were any of the remaining six cases akin. In no one of the nine was there a family history of malignant disease.

"CASE 3.—I will quote but two more instances of what I have called 'cancer houses.' In one a domestic servant suffered from cancer of the breast in 1864. Many years after a gentleman who had long lived in the same house died of cancer of the bladder in 1890.

"CASE 4.—In the other an elderly man died eighteen years ago from cancer of the rectum. He was at one time under the care of Mr. Furneaux Jordan, who confirmed the diagnosis already made of malignant disease. Eight years ago his wife also died of cancer of the rectum. She had continued to reside in the same house."

In a subsequent paper on "Endemic Cancer," published in October last,[4] Mr. T. Law Webb adds this note to Case 3:—"A lady who has for many years paid an annual visit to this house, staying some weeks on each occasion, tells me that her maid, who always accompanied her on these visits, died in 1893 from cancer of the uterus. It is singular that the inhabitants of this dwelling do not drink the water from their own pump on the premises. For some reason not very evident they prefer the water from a pump situated close to a row of old cottages four hundred yards lower down the valley. In these cottages I attended a woman with cancer of the breast in 1875, and another with cancer of the uterus in 1885. The pump is close to the houses, and not far from the cesspool." Following this note Mr. Webb gives some additional illustrations.

"CASE 5.—In 1868 a maiden lady, living at No. 5 in a terrace in which were five houses, died from cancer of the breast. Her brother, who had formerly lived at No. 1, kept a public-house two miles away. He died from cancer of the mouth. His widow continued the business for some years and then retired, coming to reside in the above-mentioned terrace at No. 1. She died soon after from cancer of the uterus, in 1884.

"CASE 6.—An accountant in a village near here died from cancer of the breast in 1869; his housekeeper died in the same house from cancer of the stomach in 1885; and in the year 1894 the gentleman who succeeded to the duties of the deceased accountant succumbed to cancer of the tongue complicated with disease of the lungs. He occupied the same rooms as his predecessor. The water used in this house comes from an open well by the roadside.

"CASE 7.—The wife of an ironworker died from cancer of the uterus in a certain row of cottages in 1867. The man soon married again, and continued to live in the same house ten or twelve years. He then moved to a house nearer to his work, where he soon after died from heart disease. His widow died in 1892 from cancer of the uterus. The water used for drinking, in the row first mentioned, was a mixture of surface water and spring water from a roadside spout.

"CASE 8.—A patten-maker died in 1875 from cancer of the rectum; his widow died in the same house, also from cancer of the rectum, in 1884; and a daughter who had lived for many years with these old people died from cancer of the breast in 1888. Drinking water was obtained from a pump a few yards from a cesspool.

"CASE 9.—A labourer, who lived in a block of houses near to the Severn, died in 1876 from cancer of the rectum. His widow died in the same house in 1877 from cancer of the bladder. In this case the diagnosis was confirmed by a

[1] Abstract of the Morton Lecture on Cancer, by Samuel G. Shattock, F.R.C.S. Eng. THE LANCET, May 19th, 1894.

[2] Geographical Distribution of Disease in Great Britain. Second edition, p. 288, Cancer. Swan, Sonnenschein, and Co.

[3] Birmingham Medical Review, vol. xxxii., December, 1892.

[4] Ibid., October, 1894.

post-mortem examination. The water used for drinking by these people was from a roadside well half a mile distant.

"CASE 10.—In 1885 a furnaceman died from obstruction of the bowel of an obscure kind. A post-mortem examination revealed the presence of a button-shaped mass of carcinoma in the sigmoid flexure of the colon and also secondary growths in the anus and perineum. He died in one of two cottages forming a single building lying back from the road in a garden. In 1893 a woman died in the other cottage from cancer of the uterus. Both these houses use water from the same well, which is near the privy. There is no drainage whatever. A cesspool receives everything, and is emptied once in five or six years."

I consider the above cases to be so interesting, and so typical of what probably is taking place more or less all over Great Britain, that I am anxious to call the attention of the medical profession to them, and especially that of my fellow workers in this investigation. With regard to the possibly polluted water-supply in those cases I may refer your readers to what I have already published in THE LANCET.[5] I may remark that I did not read Mr. Shattock's Morton Lecture until August, when I at once communicated with Mr. T. Law Webb, who readily placed at my disposal all the particulars of the localities in which his cases occurred. At that time I was engaged in the investigation of cancer in the catchment basin of the river Wey in the Farnham district of the Thames basin, and had just unearthed one of those "cancer houses" which I have long had reason to believe contribute their share towards keeping up the endemic character of this class of malignant diseases, especially when situated in favourable conditions.

CASE 11.—In a hollow ("bottom") on the border land of Surrey and Hampshire, where one of the tributaries of the river Wey—formed by the springs issuing from the point where the lower green-sand (Hythe beds) rests on the Atherfield clay, and on which lies the wealden clay—for a short time forms the county boundary until it is lost in Frensham Pond, there stand a few cottages, in one of which there has been a succession of cases of cancer. This hollow, or "bottom," is one of several which flank the lower green-sand ridge and its spurs that culminate in Hindhead Hill (895 ft.). The part of the "bottom" on which the cottages stand is about 390 ft. above sea level and is enwalled by heath-, heather-, and bracken-covered ridges of greensand rising to between 500 ft. and 600 ft. within a radius of half a mile. The upper part of the "bottom" is comparatively dry, but as one descends and approaches the 450 ft. level the soil gets damper, until alders, rushes, and moss are met with growing luxuriantly, and everything apparently sodden. The house in which the cases occurred stands about 20 ft. above the stream (which sometimes floods its banks), and is not now occupied, as a new one has been lately built close by. A man aged sixty-eight, to whose case from the old house my attention was first drawn, contracted epithelioma of the lip and died in the opposite "bottom," to which he had migrated a few years ago. He informed me that his grandmother first died from cancer, then her son, and, thirdly, her grandson, his cousin, all of whom had been operated upon but died. He then contracted the disease whilst living in the same house where the others lived and died, but he subsequently left his native hollow and lived in one on the opposite side of the ridge, where he died last summer. The river Wey, which waters Farnham and Frensham, floods its banks at times in many places; and coincident with this fact is the high death-rate in the Farnham district from cancer among females at and above thirty-five years of age.

In addition to the above cases I find two others reported from France. Dr. S. Duplay, professor of clinical surgery at the Medical Faculty of Paris, and Dr. Cazin, chief of the laboratory of the Charité Hospital, in their lectures on the Contagiousness and Inoculability of Cancer,[6] refer to the two following cases:—

CASE 12.—Dr. Fiessinger has reported the occurrence of a veritable epidemic of cancerous disease in a group of three houses at Oyonnax, where four cases of cancer came under his personal observation in the space of four years. In all four patients the affection could apparently be traced to contamination with the dressings from a case of scirrhus of the breast.

Several instances of "house epidemics" of cancer have been collected by Dr. O. Guelliot of Reims, some of which were observed by himself and the rest by various writers.

CASE 13.—Dr. Fabre has also published a number of original observations, including one by Dr. Hambert Mollière of a series of four cases of cancer occurring in less than ten years among the occupants of a house under circumstances which, according to the observer, preclude all possibility of a mere coincidence.

Dr. Duplay concludes by stating that "the evidence in this direction is not sufficiently conclusive to permit of a definite opinion. I shall therefore dismiss the subject without further discussion. The facts above enumerated appeared to be worth mentioning, if only because they confirm Professor Metchnikoff's hypothesis (in favour of the psorospermal theory) that cancerous neoplasms might possibly belong to a group of miasmatic diseases capable of being propagated by spores formed outside the organism."

I believe with Mr. T. Law Webb that if such cases were more thoroughly sought after and recorded than they hitherto have been much light would be shed not only upon the etiology of cancer, but upon the causes that promote its increase and extension, a knowledge of which in the sequel may lead to the enforcement of greater caution in the treatment of this class of malignant diseases.

Buxton.

[5] Increase of Cancer, its Probable Cause, THE LANCET, Aug. 9th, 1890.
[6] The Medical Press, Jan. 16th, 1889, pp. 58-59.

THE THERAPEUTICS OF PAPAIN.

BY EDWARD G YOUNGER M.D. BRUX., M.R.C.P. LOND.,
PHYSICIAN TO THE ST. PANCRAS AND NORTHERN DISPENSARY; PHYSICIAN TO THE INFIRMARY FOR DISEASES OF THE CHEST AND THROAT, MARGARET-STREET; AND PHYSICIAN TO THE FINSBURY DISPENSARY.

INDIGESTION, either as a primary disorder or secondary to some other departure from health, notably in tuberculosis, is so frequent a symptom among hospital patients, and when left untreated is productive of such marked deterioration in the general health, that one is tempted to try with an open mind remedies which appear to possess properties likely to restore the functional activity of the digestive apparatus, or which at least will do the work which nature, handicapped by the fact that part of the machinery is out of gear, leaves undone. Among the digestive ferments there is one which apparently possesses properties peculiar to itself, one, moreover, which is stated to produce its effects under conditions less rigidly defined than pepsin, in that it converts proteids into peptones in either an acid or alkaline medium. Inasmuch as this indifference to the reaction of its medium enables the drug to continue its action in the intestines after leaving the stomach, one is justified in anticipating that satisfactory results might be obtained in cases in which pepsin fails to attain the object in view, which is, of course, complete gastro-intestinal digestion. These considerations have led me to employ Finkler's papain—for this is the digestive agent I refer to—somewhat extensively during the past year in the treatment of various forms of dyspepsia. The results on the whole have been so satisfactory that I think a brief account of some of them may be deemed worthy of publication. I have before me the record of some fifty cases in which I have prescribed papain. By far the greater number of these patients were young women and girls who were suffering from atonic dyspepsia as a troublesome concomitant of amenorrhœa, neuralgic dysmenorrhœa, menorrhagia, incipient phthisis, and some forms of hysteria, and in nearly all my success with the drug has been most marked and rapid. The other cases in which I gave papain were those of patients suffering from the dyspepsia of a more advanced stage of phthisis, from chronic bronchitis, and valvular disease of the heart. Here, too, I usually succeeded in alleviating the symptoms directly referable to the digestive trouble, which, of course, was all I was entitled to hope for. I append brief notes of twelve cases picked out almost at random principally from my out-patient records. It will be observed that where benefit ensued from the use of the drug the improvement was, as a rule, unmistakable after the ingestion of the first dose or two.

CASE 1.—A pallid woman aged twenty-one years, with waxen complexion, came under my care in September, 1893. She had enlarged and flabby tonsils, and complained of pain in swallowing together with general languor and debility. Her menses were regular, but profuse and painful. Her throat trouble soon yielded to simple treatment by chlorate of potash and hydrochloric acid, and she took iron (principally in the form of ammonio-citrate) until Sept. 14th, 1894, with

considerable benefit to the general health; but at this date she complained of pain in the epigastrium coming on almost immediately after meals and after taking the medicine. She was also constipated. I ordered one grain of papain, five minims of dilute hydrochloric acid, and chloroform water to one ounce, to be taken three times a day after meals, together with five grains of aloes and iron pill to be taken every night at bedtime. The relief was immediate and marked, and she has complained of no dyspeptic symptoms since. The anæmia is steadily improving and she is still continuing the treatment.

CASE 2.—A young woman aged nineteen years, first seen on Aug. 4th, 1894. She was anæmic and complained principally of pain and flatulence coming on almost immediately after meals, with occasional waterbrash. Menstruation was regular, but had been painful and excessive. I prescribed a mixture of subnitrate of bismuth with bimeconate of morphine, which I afterwards supplemented with Blaud's pill. She did not appear to derive any benefit from this treatment, so on Sept. 1st I put her on papain with hydrochloric acid and gentian, continuing the Blaud's pill. The pain was much relieved after a few doses, but the flatulence and waterbrash did not entirely leave her until Oct. 6th. She is now quite free from dyspeptic symptoms, and her general condition is steadily improving except in respect of the menstrual irregularities, which continue to give her trouble.

CASE 3.—A woman aged twenty-two years came to me on Sept. 16th, 1893. She was by occupation a seamstress, and worked about eleven hours a day. She was pale and thin, and complained of intense pain at the epigastrium, coming on shortly after a meal and lasting for more than an hour. She said she thought she had been losing flesh for some time past. The menses were normal; the bowels were confined. Auscultation revealed dulness over the right apex, with bronchial breathing, bronchophony, and some rather fine crepitation, but she did not cough much, her principal troubles being those referable to the dyspepsia. She obtained passing relief from a bismuth mixture, and was then put on the ammonio-citrate of iron, when the dyspepsia straightway returned, not being relieved this time by bismuth. I then prescribed papain with dilute hydrochloric acid, which gave her immediate relief, and this treatment she is still under, with the addition of five grains of Blaud's pill twice a day. Her digestion is now accomplished without any trouble, and she has increased in weight. Her lung trouble remains about the same.

CASE 4.—A young woman aged nineteen years came under observation on Nov. 24th, 1894. She said her life was made a burden to her by the periodical recurrence of pain in the stomach supervening immediately after meals, lasting about an hour and accompanied by flushings and heartburn. The appetite was variable, being sometimes almost in abeyance and sometimes ravenous, but at present very poor indeed. She was markedly anæmic, with a small pink spot on either cheek. The chest sounds were normal, menstruation was regular, and the bowels regular. I ordered her one-grain doses of papain with hydrochloric acid and gentian, to be taken thrice daily after meals, with five-grain doses of Blaud's pill twice a day. At her next visit she reported herself as much better, the pain and heartburn having ceased to trouble her almost with the first dose of the medicine. She no longer becomes flushed after meals, and the appetite has improved. She has asked to be allowed to continue the treatment.

CASE 5.—A young woman aged eighteen years came to me on August 25th, 1894, with a history of having felt languid and unwell for five or six months, with pain in the epigastrium coming on half an hour after food and lasting an hour. There was no vomiting. The menses had never been regular, and she had seen nothing for over two months. The bowels were constipated. I ordered the usual dose of papain with acid thrice daily, with a ferruginous pill. I saw this patient again on Sept. 1st, when she stated that the pain in the stomach had quite gone, having markedly improved after the first dose. On Sept. 15th she reported herself as "ever so much better." She has not returned since that date, so I presume she considers further treatment unnecessary.

CASE 6.—A young woman aged nineteen years came to me on Sept. 1st, 1894, complaining of acid vomiting coming on half an hour after taking food, unaccompanied by pain. This state of things had lasted upwards of three months, with the result that she had been gradually getting thinner. The appetite was commonly ravenous. The menses were fairly regular, but profuse. I detected nothing abnormal in the chest, but she looked pale and pinched. I ordered papain in one-grain doses, with acid. When I saw her again on Sept. 8th she told me the vomiting had ceased at once after taking the medicine; in fact, the dyspeptic symptoms for which she had consulted me now troubled her so little that she was anxious to be given a tonic. Under a mixture of ammonio-citrate of iron, however, all the symptoms returned in an aggravated form, and she came back begging to be put back on the old medicine. The papain again gave her almost immediate relief, and she continued the treatment until able to dispense with its assistance.

CASE 7.—A somewhat emotional woman aged twenty-five years, subject to mild attacks of hysteria, had suffered from "pain over the heart," increased after meals, for three months in July, 1894, with flatulence and eructation. She menstruated every three weeks. The bowels were irregular. The lungs were normal on auscultation. The heart's action was rapid, but there was no evidence of valvular mischief. Under papain and Blaud's pill she professed to be improving greatly (and she certainly looked much better), when on Oct. 20th she came back in a highly hysterical condition and said she was very much worse. I ordered her a mixture of bromide of potassium and valerian and have not seen her since. She was certainly improving under the papain, but the hysterical element rendered her a very unsatisfactory patient to deal with.

CASE 8.—A woman aged fifty-eight years came to me in July, 1894, with a history of Graves' disease extending over ten years, which had been aggravated by an attack of influenza the previous Christmas. For the last three years she has had more or less œdema of the ankles. Her principal complaints now were palpitation of the heart and vomiting directly after the ingestion of food. She was markedly cachectic and there was slight general enlargement of the thyroid gland. Proptosis was very marked. The lungs were fairly normal, but the heart was rapid and most irregular, with an occasional intermission; there was no murmur. I ordered papain with hydrochloric acid and digitalis, under which the vomiting promptly ceased. She improved in many ways until Oct. 31st, when, the stock of papain being temporarily exhausted, I ordered a bismuth mixture to go on with. The urgent vomiting returned, and at her next visit she begged to have her old medicine. This afforded the desired relief and she is still continuing the treatment.

CASE 9.—A woman aged twenty years came under my notice on Sept. 24th, 1894, and complained that for three months past she had been troubled with pain directly after taking food, so intense that she was afraid to eat. The menses were every fortnight, sometimes scanty and sometimes profuse. The chest sounds were normal. Her aspect was very anæmic. In this case papain with aloes and iron pill failed to give relief, so a week or so later I gave her some bismuth and bimeconate of morphine, under which she is improving at the present time.

CASE 10.—A young woman aged eighteen years came to me on Sept. 29th, 1894, complaining of pain at the epigastrium coming on after meals and running through to the back between the shoulder-blades. She felt sick, but did not actually vomit. She was very anæmic, and the menses, though regular, were scanty. The pain absolutely disappeared after the first dose or two of papain, and she improved so much that in a short time she felt well enough to discontinue the treatment.

CASE 11.—A woman aged twenty-four years had been under treatment for anæmia off and on ever since she was nineteen, in addition to which she suffered from dysmenorrhœa and constipation. She was never satisfied with any medicine for long together and would often disappear for several weeks or months and give some other institution a turn. On Nov. 7th, 1894, she came complaining of frightful pains after meals, not accompanied by vomiting, and she looked very pale and ill. I ordered her a mixture of papain. At her next visit she looked much better and grudgingly admitted that the pain was better after taking the medicine. I lost sight of this patient, so I am unable to say whether permanent benefit followed the treatment.

CASE 12.—A woman aged twenty years came to me on Nov. 20th, 1894. She said that since an attack of influenza a year ago she had been troubled with a cough with scanty frothy expectoration. There had been one attack of slight hæmoptysis five months ago. Menstruation was regular, but scanty. The bowels were regular. The appetite was poor. Of late she said she always felt sick after food and often

vomited. Her mother died from phthisis. Nothing abnormal could be made out on auscultation of the lungs, but the heart's action was rapid and heaving, and there was a slight systolic murmur at the apex conducted outwards. In order to relieve such of the symptoms as were referable to the stomach I ordered her a mixture of papain, and the vomiting forthwith ceased. She is still under treatment.

CASE 13.—A man aged fifty-one years came on Sept. 15th, 1894, complaining principally of pain and vomiting after meals, from which he had suffered off and on for seven years. There was some consolidation at the apex of the left lung. The vomiting ceased at once under papain, though the pain did not entirely disappear under the treatment. I then combined small doses of morphine with the papain, under which the pain and other symptoms disappeared, and he was soon enabled to discontinue his attendance.

I have chosen these cases pretty well at random in order to show in what instances papain did good and also those in which it either did not afford relief or had for some other reason to be discontinued. In uncomplicated cases of atonic dyspepsia papain appeared to exert very beneficial effects, and in the instances in which this was the case I was struck by the almost immediate relief thus obtained. In only three cases in which I have prescribed the drug did it apparently fail, but in two of these (Cases 7 and 9) the patients were emotional women in whom the dyspepsia was associated with subjective symptoms of a hysterical character. The third case was that of a man aged forty-six years, an alcoholic, who suffered from dyspepsia with waterbrash, which yielded to bismuth.

Mecklenburgh-square, W.C.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A CASE OF DIABETES INSIPIDUS.

BY ROBERT J. LEE, M.D. CAMB., F.R.C.P. LOND.,
LATE PHYSICIAN TO THE HOSPITAL FOR CHILDREN, GREAT ORMOND-STREET.

A YOUNG woman nineteen years of age was for many years the subject of diabetes insipidus. The malady was attributed to a fall from a hayrick when she was about four years old, and up to the time when she had the attack about to be described, which occurred last June, there was nothing unusual to record. The chief trouble during those years was thirst, particularly during the night, which led to the drinking of between three and four quarts of water after going to bed and getting up in the morning. The illness, which commenced in June, followed immediately after exposure to the strain of an examination, and retention during some hours, without permission to leave the room, caused great suffering each time it occurred. Great weakness followed immediately; the symptoms of diabetes ceased, and there was no thirst during the night. When the case came under the care of my friend, Mr. James Kingston Barton, the great state of prostration and feverishness led to the suspicion that this was some form of remittent fever, and soon it was considered proper to report the case to the medical officer of the parish. The skin was highly congested, the pulse quick, and the temperature, when Mr. Barton first took it, in the morning was 102·5° F. and in the evening 104·5°. It continued like this for a week and then fell for a fortnight two degrees morning and evening. Then it rose three degrees—that is, to 103° and 105°—for a week, and fell again lower than it was before. In this way from June 22nd to Aug. 22nd the state of fever continued without any symptoms of intestinal disorder or of other serious nature except attacks of nasal hæmorrhage so violent as to cause great alarm. During the next month a gradual fall of temperature to the normal took place, and gradually the night thirst returned, so that by the middle of September there was nothing to note except great prostration and not enough strength to allow of the patient being moved to the seaside till some weeks further had passed. By degrees during the winter the patient's strength has been restored to some extent, but not entirely to its former state, and the case seems to deserve notice in the interest of those who may be exposed in examinations at schools, where such easily prevented accidents are possible. So far as treatment deserves notice, it may be remarked that no effect seemed to be satisfactory, and that not until the symptoms of returning diabetes displayed themselves did there appear to be any sign of improvement. It is strange to have a person in whom the healthy condition of the kidneys is one favouring excessive secretion of urine, and that any interference with this action is liable to serious constitutional disturbance. If this case recalls similar cases to others it would be interesting if they were recorded, and would help us to comprehend the curious and inexplicable phenomena that appear in diabetes in its various forms.

West Kensington, W.

SWALLOWING OF A PIN BY A CHILD.

BY JAMES TILY, M.D. ST. AND., L.R.C.P. EDIN., M.R.C.S. ENG.

INSTANCES of a pointed metallic body passing harmlessly through the alimentary tract are sufficiently unusual to justify the publication of the following case. A child aged five years having swallowed a pin on the evening of Nov. 21st, I directed that solid food, such as rice pudding &c., should be taken, and also gave a mixture containing tincture of opium, tincture of lavender, and chloroform water. On the evening of Nov. 23rd the pin was voided per anum, firmly packed in a solid cylinder of fæces, having consequently traversed the alimentary canal in forty-eight hours. It may be described as a small scarf-pin, having a total length of almost an inch and a half. The head is circular, flat, very thin, and nearly three-eighths of an inch in diameter; the stem is of brass, slender, and very sharp, and its upper part is bent so that the stem is parallel to the plane of the head. The diagram gives a good idea of the size and shape of the pin.

Chiswick.

ON ABSORBENT DRESSINGS, ASEPTIC AND CHEAP.

BY ARTHUR NEVE, F.R.C.S. EDIN.,
SURGEON, KASHMIR MISSION HOSPITAL, INDIA.

FIFTEEN years ago there was no consensus of opinion with regard to the best materials for surgical dressings. Listerism was introducing everywhere the use of gauze with mackintosh outside. Gamgee and others were working with absorbent material, whilst tow and ordinary cotton-wool were the staple dressings elsewhere, and carbolic oil the favourite application. As a rule the dry dressings were not aseptic, and the antiseptic dressings were not dry. The introduction of medicated absorbent cotton-wool and wood-wool reconciled these two methods; gauze dressings have also been used dry for many years, and many of the old crude applications have been banished, so that in the hospitals of Europe the same cardinal principles are everywhere recognised and to a great extent the same materials adopted. It may be assumed that surgeons are now satisfied with the ample choice of sterilised or antiseptic and absorbent gauzes or wools, but that managers of hospitals and war officials are less content with these changes, which have involved "an altogether astounding increase in expense." The question of cheapness cannot be altogether set on one side. It is not a question of antiseptic *versus* septic surgery, but of *cheap* versus *expensive antiseptic* appliances. The French War Department has adopted peat as the best cheap absorbent dressing. Peat-moss appears to have been used successfully in Russia for the last ten years. Suggested by Leisrink, it was soon used by Schede, Hagedorn, and others. I tried it for a time, but soon fell back upon sawdust pads, which have now been our staple dressing material for over ten years. Thomas of Liverpool and others have used them in England. These have now been introduced by Surgeon-Lieutenant-Colonel Lawrie into the hospitals and dispensaries of Hyderabad State. They are cheap. In Kashmir sawdust costs about sixpence a hundredweight. The muslin bags can be made at the rate of about 500 for £1. They can be made aseptic or antiseptic. We impregnate the pads the day before use with a 1 in 2000 solution of mercuric zinc cyanide. They can be easily

sterilised in a Cathcart's or Schimmelbusch's oven. They are absorbent, but not too drying. Surgeons who have used moss have found it too drying, as the discharges crust underneath it, and the moss needs damping from time to time. Sawdust pads will absorb twice their own weight of pus or serous discharge. Absorbent wool frequently allows a small amount of discharge to penetrate to the bandages. This seldom happens with well-adjusted pads. They are exceedingly light and comfortable and, if well made, adapt themselves to the shape of any surface. The sawdust should not be too fine or the muslin too coarse.

Kashmir, India.

A Mirror OF HOSPITAL PRACTICE BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

THE following cases under treatment at St. Thomas's and St. Mary's Hospitals illustrate difficulties which may occasionally arise in making a correct diagnosis as to the nature of a tumour in the renal region. Hepatic enlargements on the right side, splenic enlargements on the left, ovarian tumours, or accumulations of fæcal matter in the large bowel—these are well recognised as sometimes closely resembling renal tumours, and the surgeon remembers them as conditions to be eliminated in coming to a true opinion as to the exact seat of the tumour. The symptoms produced by some other growths in the lumbar region are shown by these cases as well as by those under the care of Mr. H. Morris which we publish at p. 1047.

ST. THOMAS'S HOSPITAL.

A CASE OF CARCINOMA OF THE LEFT KIDNEY OF UNUSUAL DURATION; NEPHRECTOMY; RECOVERY; REMARKS.

(Under the care of Mr. WILLIAM ANDERSON.)

THE history of an enlargement noticed for six years in the region of a kidney which proved to be the seat of a carcinomatous growth is unusual, more especially as hæmaturia, one of the most characteristic symptoms of such a disease, was absent throughout. As regards removal of such growths of the kidney, Mr. Greig Smith[1] writes: "In all cases where the disease has been known to exist for some months, where the growth is large, and more particularly if it is firmly adherent in the loin, no operation is advisable. ..... In a word, for malignant disease nephrectomy is a justifiable procedure only in a few specially selected cases." In this patient there appeared to be no evidence of secondary growth, and the result of the operation fully justified the removal of the kidney. We are of opinion that statistics of the operation of nephrectomy for malignant disease would show a greatly diminished primary mortality at the present time. The case to which Mr. Anderson draws attention in his remarks is one which shows the close resemblance between a malignant growth of the large bowel in front of the kidney and a tumour of the kidney itself. The difficulty thus caused in coming to a correct diagnosis does not often present itself in actual practice, but should be borne in mind. It would be very much increased if a renal growth had extended into the overlying bowel and produced destruction of its wall. Such a case has been recorded by Dr. Pescher;[2] there was extensive adhesion between the tumour (a primary hard carcinoma) and the colon, with numerous perforations of the latter, allowing of the escape of fæcal matter into the peritoneum. For the notes of this case we are indebted to Mr. Finch White.

The patient, a woman aged fifty-one years, was admitted into St. Thomas's Hospital on Jan. 3rd last, with a tumour on the left side of the abdomen. The growth was first noticed six years ago (nine months after the birth of her last child) as a painless prominence of the size of a fowl's egg, situate near the level of the umbilicus. She had lost flesh during the few previous months, but remained fairly strong, and had suffered from no functional disturbance except a slight cough with occasional expectoration of a little bloodstained mucus. There was a family history of strong tuberculous predisposition, but none of malignant growth. On admission she was a tall, thin woman, somewhat emaciated, but showing no sign of prostration. Local examination demonstrated a tumour of irregularly rounded outline, and about the size of an ostrich egg, projecting below the costal border on the left side; it could be traced backwards into the loin, downwards as far as the iliac crest, inwards to the median line, and above as far as the line of gastric resonance. It was dull on percussion, insensitive to pressure, and was freely movable within certain limits, but appeared to have connexions at the back of the abdominal cavity. The descending colon ran down on the outer side of the mass. The urine contained a trace of albumen, but no other evidence of visceral disease was ascertainable. It was considered that the growth was most probably renal or omental in origin, but in any case an operation was desirable. On Feb. 4th Mr. Anderson opened the abdomen through the left linea semilunaris. The great omentum was exposed, and on drawing this up the posterior parietal peritoneum and the left colic vessels were found to be tightly stretched over the tumour, while the descending colon was pushed over to the left. The colic vessels were ligatured and the peritoneum was divided, exposing a smooth, rounded, slightly lobulated growth which could be traced backwards to its origin from the upper end of the left kidney. It was carefully isolated, the pedicle of the kidney was exposed, and the renal vessels with the ureter were divided into three segments, which were ligatured separately. The whole mass was then detached and the abdominal wound closed. The supra-renal capsule was not seen during the operation, and no enlarged glands could be felt. Little blood was lost, but an enormous number of ligatures was required. The shock of the operation was rather severe but not grave, and the patient was in good condition on the following morning. The temperature remained normal in spite of an attack of bronchial catarrh until the end of the week, when a slight rise occurred. On removing the dressings a quantity of inodorous pus escaped from the lower angle of the wound. The discharge gradually ceased, and the patient left the hospital on March 24th. The tumour was pronounced by Mr. Shattock to be a carcinoma involving the upper third of the kidney.

Remarks by Mr. ANDERSON.—This was a case in which, from the position and mobility of the growth and the absence of pathognomonic symptoms, a positive diagnosis was almost impossible. Two alternative opinions as to its nature were hazarded, and one of these was found to be correct, but it would not have given rise to any great astonishment had the tumour proved to be something of a different kind. It is still somewhat difficult to reconcile its undoubted malignancy with the long history given by the patient and with the absence of indications of cachexia. The following brief outline of a second case, under treatment at the same time, serves to illustrate further the difficulty that may arise in the interpretation of local signs in this region. The patient, a woman aged fifty years, was admitted into St. Thomas's Hospital with a large oval tumour occupying the left loin and extending upwards to the area of gastric resonance and downwards into the pelvis. It appeared to correspond exactly to the region of an enlarged kidney, and this impression was supported by a marked diminution in the excretion of urea, and by the presence of a small quantity of albumen in the urine. All the other functions were normal, except for an occasional attack of diarrhœa, to which the patient had paid little attention. A diagnosis of renal tumour was formed with some confidence, and it was proposed to remove the growth by a free lumbar incision. On cutting down at the back of the loin a kidney of perfectly normal aspect was exposed, and the tumour sought was felt in front of the organ. A second incision was then made in the left semilunar line and the disease found to consist of a carcinoma of the descending colon, the wall of the gut being replaced by an enormously thick mass of new growth, while the lumen evidently remained sufficiently large to allow free passage to fæcal matters. The wound

[1] Abdominal Surgery.
[2] Sajous' Annual of the Universal Medical Sciences, 1889, G. 30.

was closed and the patient rapidly recovered. She left the hospital a fortnight later, not only none the worse for the exploration, but expressing herself as feeling much better and more comfortable than before. These examples, with many others which the experience of every surgeon can furnish, will show that it behoves the operator to approach in a tentative spirit even the cases in which he is most inclined to form a positive diagnosis, that he may be ready for any surprise, and undisconcerted in action should the conditions prove to be what he least looked for. Fortunately we may now resolve our doubts with a minimum of risk to the patient, and with a hope that the exploration, even though it go no farther, may afford a relief that science has yet to explain.

ST. MARY'S HOSPITAL.

OBSCURE "RENAL SYMPTOMS"; CANCER OF ASCENDING COLON; RESECTION; DEATH; REMARKS.

(Under the care of Mr. EDMUND OWEN.)

IN considering the diagnosis of such a case as the following it must not be forgotten that the probable mistake made occurred a year before the patient came under treatment at St. Mary's Hospital. At that time the tumour would be much less distinct and the difficulty in coming to a correct opinion much greater. This does not, however, detract from the importance of the case from a clinical standpoint, but is rather emphasised by what Mr. Owen says of the former operator. There are many other abdominal swellings which must be considered by the surgeon in making a diagnosis of movable kidney before he can feel confident that the tumour which he feels is the kidney—viz., impacted fæces in the colon; ovarian tumours, especially small ones with long pedicles; tumours of the parovarium; hydrosalpinx; enlargements of the gall-bladder; deposits in the pylorus, inflammatory or malignant; tumours of the omentum; dermoid tumours of the intestinal wall; and pancreatic growths. As a rule the diagnosis is easy and the surgeon is unlikely to make a mistake; Mr. Owen's case shows the necessity of a careful consideration of the symptoms and accurate examination of the abdominal tumour. For the notes of this case we are indebted to Mr. W. D. Wiggins, clinical clerk and dresser.

The patient, a man aged fifty-five years, was admitted into the Thistlethwayte Ward of St. Mary's Hospital on last New Year's Day. He looked very worn and ill, and he remarked that he had lost four stone in weight during the past three years. He said that his troubles began about four years ago with a dull, dragging pain in the right loin, which sometimes extended across the abdomen, but generally shot down into the right groin. The pain came and went irregularly, lasting six or ten minutes and disappearing completely between the attacks. He steadily got worse, and a little more than a year ago he went into a hospital, where the surgeon under whose care he was told him his distress must be due to the fact that he had a "floating kidney," and that it ought to be cut down upon and stitched in its proper place. To this operation he said he submitted, and a long, linear scar running obliquely over his right lumbar region seemed to confirm his statement. The man further said that the very day after that operation he had recurrence of his old pains as severely as ever, and that on informing his surgeon of this he had received the explanation that the kidney must have broken loose again. The operation produced no improvement whatever. On the other hand, the pains, which were steadily increasing up to the time of the operation upon the kidney, continued to increase subsequently, so that when he applied for admission to St. Mary's Hospital he compared them to "a thousand knives." He had also been troubled with loose, blood-stained actions of the bowels. On examination a hard, tender, and circumscribed tumour could be felt deeply in the region of the beginning of the ascending colon, well above the level of the cæcum. It was hard and tender, and was evidently the starting-point of all his pains. Whilst examining this mass it was noticed that distended pieces of intestine in the neighbourhood were struggling to rid themselves of flatus, which was apparently divided up into hard, ball-like masses. Indeed, so vigorously was the peristaltic action being carried on that the gas was locked up in the segments of the bowel under such tension as to convey, at a first touch, the idea of the balls being solid. But they were resonant on percussion, and presently changed their position or disappeared altogether. The man was given to understand that he had a large cancrous mass which was blocking his bowel, and that though in all probability it could not be removed, an operation might be performed with the view of getting the contents of the bowel beyond the blockage. On Jan. 4th a free incision was made through the right semilunar line, and a hard mass of the size of the fist was found in the colon as it ascended in the renal region. Mr. Owen proposed connecting the ileum with the colon above the obstruction, but on one of his colleagues urging that this might afford the patient but short or imperfect relief, he resected the bowel and connected the divided ends by a Murphy's button. The growth proved to be a columnar epithelioma which almost entirely blocked the colon. Below the obstruction the muscular wall of the intestine was greatly thickened, with the object of forcing onwards the liquid and gaseous contents. On the evening before his death there was a very slight escape of feculent fluid from the wound, and the conclusion formed was that the splice was not watertight. At the post-mortem examination it was found that a perforation had occurred upon the distal side of the bowel where the thin intestinal wall pressed against the edge of the button. The man was so weak, however, when the discharge was noticed that it was not considered practicable to open up the wound and examine for a leakage.

Remarks by Mr. OWEN.—I have published this case with but a brief account of the clinical details and of the operative procedure in order that I might call attention to the uncertainty which may attend the diagnosis of "floating kidney," for I assume that this man had not at any time a floating kidney. The evidence, so far as I can read it, is very circumstantial and all against such a theory. Nevertheless, that apparently was the diagnosis made before the operation by one of the most practical, scientific, and illustrious surgeons of the day. A cancer in the middle part of the ascending colon would give rise to dull achings and pains which the patient would almost certainly associate—at first, at any rate—with his kidney; and as the mass developed, and the bowel became more and more loaded and distended, the lumbar achings would increase on account of pressure upon the psoas and the lumbar nerves. This pressure would especially be felt by the genito-crural branch, and so it came about, I think, that the patient complained of pain shooting into the groin and into the region of the cord and testis. Had these symptoms been associated with blood in the urine they might have suggested the presence of a renal calculus, but there was no history of hæmaturia. Accounts as given by patients of their former medical attendants, as of their symptoms, are usually untrustworthy. It is quite possible that the operator never suggested that this man had a "floating kidney"; but the scar gives unmistakable evidence of the kidney having been cut down upon in the loin, and this, the man said, was for the relief of pains which, except in degree, were identical with those for the relief of which I unsuccessfully removed the intestinal growth. During the operation which I performed I saw nothing to suggest that the kidney was in the least likely to shift its position. My opinion was that from the very beginning the case had been one of slowly but surely advancing cancer of the bowel.

BRISTOL MEDICO-CHIRURGICAL SOCIETY.—A meeting of this society was held on April 10th. Mr. Flemming showed a patient with an Uncommon Form of Skin Disease, and a specimen of Ulcerative Endocarditis. Dr. Aust Lawrence read a paper on Backward Displacement of the Gravid Uterus, and illustrated the communication with diagrams. Dr. J. E. Shaw and Mr. Paul Bush read a paper on a case of Tumour of the Brain involving the upper portion of the superior frontal convolution in which there was loss of motor power in the left arm and leg, especially in the movements of the shoulder- and hip-joints. The patient died three weeks after removal of the growth, and at the necropsy a portion of new growth was found bulging into the longitudinal fissure. Mr. Munro Smith showed lantern slides and specimens, prepared by Dr. Davies and Dr. Dowson, of Pneumococci found in the Bladder in a case of cystitis following pneumonia. Dr. Davies showed some interesting lantern slides of Photographs of Patients suffering from Small-pox; also micro-photographs of the Bacillus of Typhoid Fever, Tetanus, and Diphtheria.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Pathological Identity of the Various Forms of Acute Septic Inflammations of the Throat.

AN ordinary meeting of this society was held on April 23rd, the President, Mr. HUTCHINSON, being in the chair.

Dr. FELIX SEMON read a paper on the Probable Pathological Identity of the various forms of Acute Septic Inflammations of the Throat hitherto described as Acute Œdema of the Larynx, Œdematous Laryngitis, Erysipelas of the Pharynx and Larynx, Phlegmon of the Pharynx and Larynx, and Angina Ludovici. In his introduction he fully stated the reasons which had induced him, in spite of the absence of bacteriological evidence of his own, to submit his ideas on the question of the nature of acute septic inflammations of the throat and neck to the judgment of the society. He next showed the confusion which at present existed in the nomenclature of these inflammations, and defined his own position by expressing his conviction "that the various forms of acute septic inflammation of the throat and neck, hitherto considered as so many essentially different diseases, were in reality pathologically identical; that they merely represented degrees varying in virulence of one and the same process; that the question of their primary localisation and subsequent development depended in all probability upon accidental breaches of the protecting surface through which the pathogenic micro-organism, which caused the subsequent events, found an entrance; and that it was positively impossible to draw at any point a definite line of demarcation between the purely local and the more complicated, or between the œdematous and the purulent forms." This thesis was then proved—from the clinical point of view—by the communication, in order of ascending severity, of fourteen cases in point (two of them with full notes of post-mortem examinations) which had come under Dr. Semon's observation. It was shown that from the slightest cases, the septic nature of which could well be doubted, to the most severe and rapidly fatal ones, complicated by pleurisy, pericarditis, pneumonia, peritonitis, and septic infection of the central nervous system, such gradual and imperceptible transitions were met with, and that, again, the serous forms of inflammations so insensibly passed into the purulent forms, that often the greatest difficulties occurred in correctly registering a case in accordance with the present terminology. Dr. Semon then endeavoured to draw a consistent clinical sketch of the course of these inflammations, and to explain the differences in their primary localisation and their various extensions. Next he discussed the various objections which could be raised against his views—viz.: (1) that no proof had been adduced that the milder cases given in his list were really of septic origin; (2) that the different primary localisations in these cases spoke against their identity; (3) that the variations in the fever curve also seemed to show that the individual cases were due to different pathological processes; and (4) that the fact of the exudation sometimes being of a serous, sometimes of a purulent, character from the bacteriological point of view militated against his view of the identity of the pathological process causing these different forms of septic inflammation. In answering these objections he particularly dealt with the importance of the tonsils as forming a natural portal for the invasion of the organism by pathogenic microbes, and from the bacteriological point of view showed by quotations from Jordan's papers that his ideas, revolutionary as they might appear from the clinical aspect, in reality constituted a simple clinical application of general bacteriological principles to a certain group of septic inflammations. In conclusion, he urged the necessity of a sweeping revision of our present nomenclature concerning acute œdematous affections of the larynx.

The PRESIDENT thought that Dr. Semon was not really making an advance, but was falling back on old-fashioned views which had not been departed from by some. He was prepared to go even further than him, and to say that many of these diseases were transmutable. He doubted if œdema of the larynx was the same thing as erysipelas of the larynx but the one might develop from the other. He believed that there was a contagious form of catarrhal laryngitis. He had seen a case of œdema of the larynx which ended fatally, and which appeared to be produced by exposure to cold, and not by exposure to septic influences. The virulence of these diseases might undoubtedly be intensified by transmission.

Dr. DE HAVILLAND HALL said that the older writers entertained the view that these affections were identical. Four years ago Dr. Semon spoke at Berlin much to the same effect as in the paper now produced, and this induced Dr. Hall to look up his cases for the past seventeen years. As the result of that search he asserted[1] his belief that erysipelas of the larynx, phlegmonous pharyngitis, and angina Ludovici were so similar that the slight difference in their starting point was not a sufficient reason for making a different classification necessary. He recorded seven cases. The first, in a man aged twenty-one, started in the pharynx and implicated the larynx, the temperature rising to 106° F. The patient recovered and no albumen was found in the urine. The second case occurred in a man aged forty-nine, started in the pharynx, but did not involve the larynx. The patient died from pulmonary œdema, and albumen was found in the urine. In the third case, that of a female aged fifty, the pharynx was first involved and the disease afterwards extended to the larynx; albumen was found in the urine, and death occurred from exhaustion. This illustrated the old saying that when erysipelas extended internally the result was worse than when it extended externally. A man aged thirty-six was the subject of the fourth case; the disease involved the pharynx and larynx, and was a typical instance of angina Ludovici; tracheotomy was performed, but death resulted. The fifth case occurred in a man aged twenty-five; it commenced in the larynx and extended to the pharynx. There was no albumen in the urine, and recovery ensued. The sixth instance, in a woman aged fifty-four, commenced in the larynx and extended to the fauces; there was no albumen in the urine, and recovery ensued. The seventh and last case occurred in a woman aged fifty-six and involved the larynx; there were right pleurisy and pneumonia of both bases; albumen was present in the urine, and recovery resulted. All these cases presented much the same clinical picture, and he regarded them all therefore as identical.

Mr. LOCKWOOD said that much would turn upon the sense in which the term "pathological identity" was used; for identity of bacteriological invasion was not necessarily the same thing as identity of disease. In acute angina Ludovici there was a streptococcous invasion, and the same was highly probable of acute inflammation of the pharynx, larynx, and tonsils. But an acute abscess might be found in the arm due to staphylococcus aureus, and a peritonitis might exist due to the same streptococcus, but yet no one would say that the diseases in the arm and peritoneum were identical; it was necessary that there should be identity in the tissues which were attacked. In these inflammations about the neck and throat it was improbable that there was an identical bacteriological invasion in all. In one case, for instance, staphylococcus pyogenes had been found, while in other cases the presence of bacilli had not been given the prominence it deserved. Fetor was common in angina Ludovici, and this was always due to a bacillus. In one case, again, bacilli were found which produced gas, and such a case could not be considered bacteriologically the same as those in which the streptococcus pyogenes was found. As to the tissues attacked there was the widest difference; in one case the invasion might be about the epiglottis and in another about the tissues of the neck. Though there was a clinical resemblance between these diseases, yet angina Ludovici often betrayed considerable clinical differences, due to a variation in bacterial invasion. Cutaneous erysipelas of the neck could not be described as angina Ludovici; it was very different, and the three varieties of erysipelas differed considerably amongst each other.

Dr. SHARKEY said that he agreed with the conclusions drawn by Dr. Semon from the clinical point of view. In the St. Thomas's Hospital Reports for 1892 he published three cases of angina Ludovici. The first was in a man aged thirty-four, who complained of diarrhœa, and three days later had a sore-throat. The case rapidly proved fatal, and at the necropsy lymph was found in both pleuræ, and an acute inflammation with abscess was localised about the epiglottis. The second case occurred in a man aged twenty-nine, and developed equally rapidly; pneumonia supervened and tracheotomy was performed. At the necropsy an abscess was found in the

[1] Brit. Med. Jour., February, 1892.

submucous tissues about the base of the tongue. The third case occurred in a man aged thirty-nine, malaise being followed by sore-throat and pneumonia, and a hard swelling developed in the upper part of the neck below the mouth. The whole of these cases were instances of acute primary suppurative cellulitis of the neck, all occurring near enough to the larynx to produce intense œdema of the epiglottis, and the infection he regarded as probably of septicæmic origin. It was necessary to define what we meant by pathological identity, whether it referred to the question of some definite tissue being involved or to the localised or generalised nature of the disease. He thought on the whole that this clinical group of cases resembled each other as much as did examples of any one disease in other organs.

Mr. BUTLIN said that the subject, which was sufficiently complicated before, had been made still more so by the paper. The assertion was that these diseases were all septic and that they were identically the same disease. Mackenzie in his work had already included these affections with the exception of Ludwig's angina under one head, and with regard to Ludwig's angina no accurate description of it existed. There was no sufficient proof in the paper that these diseases were identical either in their appearances, their physical structure, their clinical characters, or their pathology. In a case like that of erythema nodosum we could be sure of the identity of the disease in different individuals; epithelioma also we could recognise from its clinical appearances and its structure. Tuberculosis differed enormously in its clinical characters, but its identity could be verified by the discovery of the anatomical tubercle coupled with the peculiar bacillus. In the diseases proposed to be classed as identical very few bacteriological examinations had been made and very few inoculation experiments performed. Then the paper quoted observations to show that no less than ten microbes might produce the same pathological condition and ten conditions might be the result of the action of one microbe. Though he had hoped that order and harmony might be evolved out of the group of conditions brought together, he was bound to admit with profound sorrow that after hearing the paper he was more confused than ever.

Mr. HARRISON CRIPPS said that he sympathised with Dr. Semon in his desire for uniformity, but he could not admit that that goal had been attained. Many different pathological conditions might produce a similar affection. He referred to a case, under the care of the late Mr. Luther Holden, in which the patient suffered from gangrene of the thumb of the type of the acute septic gangrene of Larrey. The arm was amputated and the patient at first did well, but three days afterwards the throat began to swell. The swelling attained very large dimensions and was covered with black patches, and was evidently due to the same cause as the gangrene of the thumb, and in both parts of the body gas was developed in the tissues. Death ensued after twenty-four hours from suffocation. In the second instance a child had suffered from facial erysipelas, but had got well. A few days later the mother was taken ill with sore-throat; the swelling increased rapidly, and she died from suffocation. The cause in that instance was undoubtedly erysipelas. In other parts of the body we might meet with swellings produced by different causes, and the neck was no exception to this rule.

The debate was adjourned till the next meeting.

MEDICAL SOCIETY OF LONDON.

Serous Pleuritic Effusion treated by Multiple Tapping and afterwards by Incision.—Sclerema Neonatorum ending in Recovery.

AN ordinary meeting of this society was held on April 22nd, Dr. COUPLAND, Vice-President, being in the chair

Dr. S. WEST related a case of Serous Pleuritic Effusion of eighteen months' duration for which the chest was tapped thirty-seven times and the side then incised, the result being complete recovery with full expansion of the lung and but little flattening of the side. The patient was a woman aged thirty-one years whose illness dated from September, 1891, fluid being diagnosed in January, 1892. In June, 1893, when Dr. West first saw her, he immediately tapped the abdomen and the fluid did not return. He next tapped the pleura, and ninety ounces of serous fluid were removed by a syphon tube, the lung expanding freely, which was remarkable considering that it had been compressed by the fluid for eighteen months. The tappings were continued at frequent intervals for nearly twelve months, and the operation was performed thirty-seven times in all, the fluid remaining serous throughout. He hoped to complete the cure by paracentesis alone, but the patient's friends became impatient, and at last he had to consent to the side being laid open. An empyema of course developed. The fever became hectic, the patient rapidly lost flesh and strength, and soon was as ill as when he first saw her. It seemed hopeless to look for her recovery, but when at her worst she suddenly began to mend without any obvious reason, convalescence gradually set in, and from this time was uninterrupted. The points of interest in the case were (1) that after the side had been full of fluid for twelve months and more the lung should not be bound down, but should be capable of rapid re-expansion; (2) the number of times that the side was tapped and the probability that complete cure might have been obtained in this way; (3) the fact that after thirty-seven tappings the fluid remained clear and serous as at the first, and that, too, in spite of air having been admitted more than once into the pleura; (4) the opening of the side for a simple effusion; and (5) the ultimate complete recovery with practically no deformity and perfect re-expansion of the compressed lung.—Dr. DE HAVILLAND HALL referred to a case which he brought forward, together with Mr. Goodsall, two years ago. Tapping was resorted to thirteen times, and 705 fluid ounces of clear fluid were drawn off altogether; the patient recovered. As there was a syphilitic stricture of the rectum it was thought that the lesion of the pleura might be syphilitic also. Up to the present time he had made up his mind that he would not open a case of simple serous effusion, and he would even go beyond thirty-seven tappings before doing so; the precarious condition of Dr. West's patient after the opening of her chest still more fortified his opinion and confirmed his fears.—Dr. ROUTH remarked that the opening of the abdomen in tuberculous disease had proved to be curative, and he did not see why this should not prove to be equally true with regard to the lung.—Dr. COUPLAND remarked that the case appeared to be unique. Could it be strictly called inflammatory? The cause of the effusion might be a local one and due to some local disturbance of the circulation. In an obstinate case of clear serous effusion into the pleura he had resorted to opening the chest, and this was followed by very serious symptoms for a time, but ultimately recovery ensued.—Dr. WEST, in reply, referred to the strong family history of tuberculosis in the case. There was a history of acute onset, and the case was one that would have commonly been classed as an inflammatory effusion. He did not think that empyema could set up tubercle, but that interference in tuberculous subjects frequently led to the development of acute tuberculosis. As most cases of tuberculous peritonitis got well by tapping it was unnecessary to resort to opening the abdomen.

Dr. ARCHIBALD GARROD then read a paper on a case of Sclerema Neonatorum ending in recovery. The patient was a male infant first seen by Dr. Garrod at the age of five weeks. At birth induration was noticed upon the buttocks, and had extended until it covered the entire back and involved the dorsal aspects of the upper arms and thighs. The indurated area did not pit on pressure; the outline was sharply defined and maplike. There was pink mottling in places. The legs could not be fully extended either at the hips or thighs, and in the popliteal spaces there was a well-marked hidebound condition. The infant was otherwise in good health, and slept and took the breast well. There were no signs of visceral disease, and the rectal temperature was 98·2° F. Within the next week some diminution of the induration was noticed, and improvement was steady from that period. As the hardness cleared up no pitting was obtained on pressure, and instead of decreasing evenly in all directions isolated islets of induration remained upon the arms and elsewhere. Within four months recovery was complete. The treatment employed was inunction of cod-liver oil, and for four weeks inunction of blue ointment. The nature of the case was discussed and reasons were given for regarding it as an example of sclerema rather than of œdema neonatorum. It was shown by reference to certain recorded cases of sclerema that the case was one of a well-defined group, the members of which exhibited close resemblances in their clinical features, and all ended in recovery. It was suggested that possibly such cases might turn out to constitute a third category, distinct both from the typical fatal sclerema and also from œdema neonatorum. Although the improvement was perhaps more rapid during

the period when mercurial inunction was employed, it had already commenced before the blue ointment was prescribed, and continued without interruption after it was stopped.—Dr. KESER said that it was not often that cases of this kind were seen to recover. He had a severe attack himself, and his brother died from it; his own recovery was attributed to warmth and diet. He had seen some incomplete and abortive cases of this disease. The first was a child born six weeks before term; it was weak, thin, had digestive disturbance, and suffered from bronchitis when a fortnight old. At the age of seven weeks the skin of the penis was noticed to be hard, and in two days the hardness had spread to the lower abdomen. It improved, then relapsed, and then ultimately the disease disappeared, the child dying afterwards from broncho-pneumonia. In the second case the child was born at term, but had been badly fed. At the age of one month induration was found in the left gluteal region, and it extended to the thigh and lumbar regions; the temperature was subnormal. The child was kept warm and on a full diet, and it recovered. In the third case the child, aged one month, developed a patch on the left cheek and ear, but these disappeared without any treatment. In Dr. Barrs' case the skin was red, and the parts involved were those touched by the napkin. The first case of which he had found a description occurred in 1718 at Ulm and was attributed to a maternal impression, the mother while pregnant having gone to a church and looked attentively at some statues.—Dr. COLCOTT FOX said that the disease was rare and was less common in England than it used to be. In certain typical cases of sclerema and of œdema respectively they could be distinguished from one another, but in many instances it was difficult to make a distinction. The first case he had seen was one of isolated bosses over the deltoid. Sclerema was said usually to begin over the lower extremities, to spread upwards, and to involve the face. In œdema the dependent parts of the body were particularly involved—the back, the buttocks, the back of the arms and the calves, but not so often the face.—Dr. COLMAN said that in most of the published cases of this affection the descriptions were indefinite and confused. In sclerema, which was usually fatal, there was an increase of fibrous tissue in the skin, whereas in œdema, which was usually recovered from, there was a physical alteration in the subcutaneous fatty or areolar tissue. It should be remembered that the skin of a new-born child was very different from that of a grown child or of an adult, and œdema would not pit in new-born children as it would in an adult. Most cases of sclerema had been put down to syphilis, but the fact that they had recovered under anti-syphilitic treatment was not sufficient evidence of syphilis. In two cases of œdema neonatorum he had found post mortem very evident visceral syphilis.—Dr. GARROD, in reply, said that in the case he had related the temperature had been depressed a degree or two; there was a nodule in the parotid region, but not distinctly on the face. The trouble commenced in the buttocks and spread upwards. The mercurial treatment might have hastened the recovery, but it did not initiate it.

BRITISH GYNÆCOLOGICAL SOCIETY.

Adjourned Discussion on the Dangers of Morphia in Gynæcological Practice.—Exhibition of Specimens.

A MEETING of this society was held on April 11th, Dr. CLEMENT GODSON, President, being in the chair.

Dr. LEITH NAPIER, continuing the discussion on Dr. Macnaughton Jones' paper,[1] said that too much stress had been laid in the paper on the influence of temperament. He concurred with the author's adoption of Zambaco's classification of morphia patients: (1) those suffering from chronic painful disease who had daily recourse to morphia; (2) those who had been cured of such affections but continued to use the drug; and (3) those who indulged in morphia for the mere pleasure it afforded. He called attention to some symptoms of the morphia habit which had been overlooked in the paper, such as sickness severe enough to contra-indicate the drug even when pain was great, various cutaneous rashes, and general pruritus. Women were more susceptible to morphia than men were, reacting readily to its exciting as well as to its sedative action. He held strongly that whilst morphia should be given for relief of pain, less potent drugs should replace it in insomnia and neuroses; for instance, the bromides, lactophenin, chloralamid, erythrina, sulphonal, and paraldehyde.

Dr. C. A. MERCIER said that not everyone who took morphia habitually was a morphinomaniac. Thus De Quincey indulged in an opium debauch at frequent intervals from 1804 to 1812; at no time during these eight years was he a slave to the drug. In 1813 a severe and painful illness led him to the daily use of laudanum, and it was only then that it obtained a complete mastery over him. He describes himself in 1816 as sitting down every night with a quart decanter of laudanum at his elbow, and he drank it without measure and without stint. The absolute dependence upon morphia and not the mere indulgence in it, however frequent or prolonged, constituted morphinomania. De Quincey was able to abandon the habit, and did so at the cost of intense suffering, without, as far as they knew, any external assistance or advice. But he never used the hypodermic syringe. It was a matter for consideration whether the tyranny of morphia administered by the syringe was not far more dominating than when it was taken by the mouth. Dr. Macnaughton Jones had pointed out that attention was first called to the prevalence of the morphia habit in 1864, and it was about that time that the syringe came into fashion. It was a remarkable fact that a successful means of breaking morphia-takers of their habit was based upon the much greater facility with which it could be abandoned when taken by the mouth. A large proportion of the daily ration of morphia could be cut off without great distress: the crux was reached when the daily quantity was reduced to one or two grains. At this stage the syringe should be abandoned, and double or treble the quantity given by the mouth. It was then possible to rapidly diminish and at last to altogether abolish the dose without occasioning any very severe distress to the patient. The conclusions that he ventured to put before the society were that the syringe should be reserved for cases of great agony requiring immediate relief; that a long course of opium, when needed, should be given in other ways; and lastly, that it was almost criminal to entrust a patient with a syringe for the self-administration of morphia.

Mr. J. F. WOODS (Hoxton House Asylum) said that he had met with six cases of the morphia habit. One was that of a medical man admitted under certificate and suffering from delusions. He had been taking twenty grains daily, hypodermically. After an attempt at suicide he was allowed his syringe, with an attenuated solution of morphia, so that instead of two grains (as he thought) he was taking one-twentieth of a grain for a dose. He improved rapidly and left in two months. After an interval he had a relapse and was again cured; some time afterwards he committed suicide by taking an overdose of chloroform. Another case was that of a woman aged forty-nine years who had taken morphia for fourteen years, having begun it under the direction of a medical man for uterine pain. On admission she gave up four syringes and two bottles of morphia. On stopping the drug she suffered from great restlessness, but he was able to cure her by hypnotic suggestion. She made rapid progress and gained two stones in weight. He heard from her last week, and she was then quite well.

Dr. T. OUTTERSON WOOD thought that it was not in asylum practice that the majority of cases were met with—it was rather among borderland neurotics; and that when their condition passed into certifiable disease recovery was rare.

Mr. W. D. SPANTON (Hanley) hoped that gynæcologists would not be held responsible for all the evils of morphia, for among men the habit was relatively more common than was usually supposed. Under no circumstances ought a syringe to be placed in the hands of a patient.

Dr. FITZGERALD (Folkestone) said that he would confine his remarks to the use of morphia in painful and hopeless malignant disease. It was the duty of every conscientious physician not only to alleviate pain where a cure was impossible, but also to ensure a painless death when the end came.

Dr. MORTON, while admitting the great value of morphia in such cases as cancer, thought that in dysmenorrhœa and allied conditions it was only very rarely needed; there was here a large scope for the recent antipyretic and analgesic drugs.

Dr. MACNAUGHTON JONES, in reply, emphasised the fact that his paper dealt only with the influence of temperament on the susceptibility to morphia intoxication. He had proved the contagiousness of the habit in some cases. Sterility was one of the acknowledged results of morphinism, and he

[1] THE LANCET, March 23rd, 1895.

gave an instance in which conception occurred after the habit was cured. Reviewing the treatment of the morphia craving he touched on the various plans: by abrupt stoppage (Lewinstein); more gradual lessening (Erlenmeyer); and the middle course of ceasing to give the morphia after a gradual decrease of the quantity had been carried over a period of from eight to twelve days. The last plan, combined with the use of various hypnotics, had given him the best results; treatment by alcohol, chloral, opium itself, the substitution of water, nitro-glycerine, &c., all failed. But it was no part of his object to discuss treatment. His main proposition was that in women suffering from subjective pain and pain arising out of functional disorders of the uterus and ovaries the risk of using morphia subcutaneously was great.

Mr. W. D. SPANTON showed the following specimens: (1) very large Cyst with Cystic Ovary removed from a married woman aged thirty years; (2) Renal Calculus of Phosphate of Calcium weighing 980 grains removed by Right Nephrolithotomy from a married woman aged forty-three years; and (3) an Imperfectly Developed Ovary with large Graafian Follicle removed from a married woman aged thirty years. In all these cases recovery followed.

Dr. LEITH NAPIER showed an Obstetric Forceps with a New Lock, the invention of Dr. Bourke.

KIDDERMINSTER MEDICAL SOCIETY.

Removal of Testes for Enlarged Prostate, with notes of two Surgical Cases.—Scarlet Fever.—Exhibition of Cases.

A MEETING of this society was held on April 5th, Mr. D. CORBET, President, being in the chair.

Mr. J. L. STRETTON gave a further report on the Removal of Testes for Enlarged Prostate in a patient whose case was read at the last meeting. When discharged from the infirmary on Feb. 20th he was able to walk about; his urine was clear and was passed naturally. A few days later he again became delirious and much exhausted, and although he recovered temporarily he gradually lapsed into the same condition, and ultimately died on March 16th. At a necropsy on the following day the body was found to be emaciated, the bladder distended with urine, its coats much thickened, and its internal surface very irregular, large muscular bands traversing it in all directions. The prostate was about the size of a bantam's egg and exhibited no signs of tubercle. That the operation gave the patient relief there is no doubt; it materially reduced the size of the prostate and restored the power of micturition. Had it been undertaken at an earlier date, before his constitution was so much impaired, it would probably have prolonged his life. A woman aged seventy years was admitted on March 5th with Strangulated Umbilical Hernia. She had been ruptured six or seven years, but had always been able to return it. It had been strangulated about thirty-six hours, and she had had fæcal vomiting, her general condition being unsatisfactory. An incision was made over the tumour, and the bowel, which was dark and congested, was returned after the ring had been nicked, the edges were freshened and brought together with deep sutures, and the skin wound closed. The operation from the commencement of the anæsthetic occupied less than half an hour. She passed flatus on the second day, the bowels acted on the fourth, and the stitches were removed on the sixth; her general condition had improved and she appeared to be going on quite well. Two or three days later she passed blood in her urine and became restless. She could not tolerate the catheter, and her symptoms became so grave that a further operation was out of the question. She died on April 1st. At a necropsy twenty-four hours after death there was complete closure of the aperture at the site of operation and no signs of peritonitis. The bladder was thickened and contained two phosphatic concretions; there were two cavities in the right kidney containing pus, and a small ovarian cyst on the left side. Mr. J. L. Stretton urged the importance of simplifying such operations to ensure their rapid performance, especially as there was the possibility of other organs being involved, as in this case, without presenting any symptoms. A man aged twenty-two was bitten seven or eight years ago by a horse about the upper part of the abdomen and two cicatrices were left. Two years ago the present condition commenced and had been gradually increasing. He was a well-developed healthy looking man. Over the lower part of the right chest in front was a large mass of new growth which was irregular in outline and had a mottled purple and red colour; it measured at the base 4 in. across and 2¾ in. from above downwards. At the lower end of the sternum was a similar mass 1½ by 1¼ in. They were freely movable on the deeper tissues and had a soft elastic feel at places. Both tumours were removed by one incision, leaving a large surface which could not be covered by skin. He made an uninterrupted recovery. Skin grafts were planted from time to time, and the whole had healed in three months. Microscopical examination showed round-celled sarcoma.

Dr. EVANS showed a case of extreme Enlargement of the Thigh Bone following Fracture.

Dr. P. E DAVIES brought forward a female child aged eleven years suffering from Congenital Syphilis with well-marked Ulceration of the Soft Palate, which he considered a rare condition.

The PRESIDENT read a paper on Scarlet Fever.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

Impacted Gall-stone.—On certain Abnormalities of Convolution and Structure in the Brains of the Insane.—Exhibition of Specimens.

A MEETING of this society was held on April 5th, Mr. A. W. Mayo Robson, Senior Vice-President, being in the chair.

Dr. CHADWICK reported a case of Impacted Gall-stone (Jaundice, six years' duration), where a solitary attack of biliary colic (January, 1889) was followed by jaundice, which persisted till death, six years later (December, 1894). The case when seen in 1892 was regarded as one of malignant disease, there being hepatic enlargement, tenderness on pressure, and much ascites, without any obvious splenic enlargement. When seen in 1894 the abdomen was retracted, there was no ascites, the spleen was enormously congested, and there was copious hæmatemesis, followed by death in a few days. An impacted gall-stone was found post mortem. The case was interesting on account of its long duration. Xanthelasma was present in 1892, but was not demonstrable in 1894. No indication of any malignant change was apparent anywhere.—The case was discussed by Mr. Mayo Robson, Dr. Eddison, Dr. Major, and Dr. Barrs.—Dr. Chadwick replied.

Dr. W. LLOYD ANDRIEZEN (West Riding Asylum) gave a demonstration on certain Abnormalities of Convolution and Structure in the Brains of the Insane, illustrated with several specimens of crania and of brains in epileptic idiocy and imbecility, including also imbecile brains in which the patients were not subject to epilepsy. Dividing the insanities into two great classes, at one extreme of which hereditary vice of organisation prevailed, it was shown that the above pathological specimens came within the above category. The insanities at the other end of the scale include such as mania, melancholia, stupor, the toxic insanities (like alcoholic), &c., with the last of which he had fully dealt elsewhere.[1] These latter presented no striking anomalies of conformation or convolution, and many of them might be conveniently included under the term "acquired" insanities. After showing that a large intermediate group of insanities existed between these two extremes of the scale—a group which he would with Marel, Magnan, Krafft-Ebing, and others designate as a "degenerative" group, it was shown how these degenerates frequently exhibited not only certain psychical characters or stigmata, which stamped them as such, but also physical characteristics of physiognomy and of brain and bodily conformation (somatic stigmata). Reserving fuller details on these for a separate communication, it was shown that in epileptic idiocy and imbecility the condition of cranial asymmetry was a striking and preponderating feature; and this the speaker proceeded to correlate with anomalies of brain development in these subjects. Case 1: An epileptic imbecile, fits since the age of four, right arm paralysed (with sclerosis and atrophy of the left Rolandic area in the brain) but liable to some active (tonic and clonic) movement when a fit occurred. The condition was one mainly of microgyria with atrophy and sclerosis of convolutions on the left side generally, and with these a parallel atrophy of the right lobe of the cerebellum was also shown to exist. Case 2: An epileptic idiot, fits since infancy,

[1] On Some of the Newer Aspects of the Pathology of Insanity. Brain, 1894.

general. The left hemisphere was of fair size and development; the right hemisphere was atrophied and sclerosed very beautifully and uniformly over the supra-marginal, occipito-angular, and temporo-sphenoidal regions (externally and mesially) over an area corresponding very accurately to the distribution of the posterior cerebral artery. The anterior and middle cerebral area had practically not suffered. The significance of this in connexion with syphilitic and alcoholic disease in the parents was shown, and further examples given of such diseases in the parents affecting the brain development of the child. Case 3: An epileptic idiot, microcephalic, showed disseminated microgyria in small territories (upper frontal, parieto-angular, &c.), unevenly scattered through both hemispheres. Other cases of epileptic idiocy were described and by the aid of photographs their pathogenesis was discussed, the conclusion being arrived at that a sclerotic overgrowth of the neurolgia fibre cells (diffuse or focal, and in the latter case often corresponding to a particular vascular territory) with a corresponding slow irritation, destruction, and finally atrophy of the nerve cells and fibres in the same area underlay the phenomena of epileptic idiocy and imbecility. Further details were given of several epileptic imbecile brains (about fifteen) examined microscopically, and one of a case of "focal epilepsy" in which the area of brain cortex excised in a surgical operation by Mr. Victor Horsley, was also investigated by the lecturer. Each and all of these concurred in showing the above type of lesion (diffuse, with small focal destructions of nerve tissue), all pointing to the same pathogenic basis in epileptic idiocy and imbecility, and in focal epilepsy. (Full details would be published later in a memoir in course of preparation.) In the brains of simple—i.e, non-epileptic—imbeciles and idiots such lesions as the above were absent, and the convolutionary forms might be, and often were, plump and well formed, though inclined to simplicity of arrangement. These were to be looked upon as general arrests of development primarily. Amongst others was shown the case of a congenital idiot (non-epileptic), speechless, dirty and degraded in habits, finally dying from phthisis at an adult age (thirty), which realised such a plumpness and yet simplicity of general brain convolution, and in which no condition like microgyria was present. (All cases of hæmorrhages, parencephaly, traumatism, &c. involving destructions of brain tissue *ab extra* were excluded from the present research to prevent complications in the study.) Further remarks were also made on pachymeningitis hæmorrhagica, and on the hardness and structure of the cranial bones in the insane.

Dr. ADOLPH BRONNER (Bradford) showed a case of Caries of the Attic in which Stacke's operation had been performed. There was a history of discharge from the ear off and on for eight years, with occasional attacks of severe pain. Perforation of Shrapnell's membrane was found and treated for several months. The ossicles were then removed, and extensive disease of the bone found. The external ear was drawn forward, the cutaneous part of the external meatus cut through and pulled out, and the diseased bone removed by chisel and sharp spoon. The ear was replaced. After five weeks no rough bone could be felt. The wound behind the ear was kept open by lead wire.—Dr. BRONNER also showed a case in which Trichiasis of the Upper Lids had been treated by transplantation of mucous membrane of the lip. An incision was made along the edge of the lid below the ciliæ parallel with the skin and a strip of mucous membrane of the lip inserted into the incision and attached with catgut sutures. In the other eye a piece of the skin of the upper lid was transplanted. The mucous membrane seemed to heal quicker than the skin.

Dr. HELLIER: Large Subperitoneal Myoma removed from Uterus.

Mr. LITTLEWOOD: (1) Vermiform Appendix removed from a case of Recurrent Appendicitis; (2) Tumour of the Lower Jaw weighing 30 oz. (twelve years' growth).

LIVERPOOL MEDICAL INSTITUTION.

Lung Cavity Incised and Drained.—Two cases of Cleft Palate to show the Natural Voice some years after operation.—Rhinoliths.—Treatment of Delirium Tremens.—Modern Miracles of Healing.

A MEETING of this society was held on April 18th, the President, Mr. CHAUNCY PUZEY, being in the chair.

It was proposed by Mr. LOWNDES, seconded by Mr. BARK, and carried, "That a subcommittee be formed to consider the recommendations of the Select Committee of the House of Commons on Death Certification."

Mr. CLEGG read notes of a case of Cavity of the Lung which he had incised and drained, and also referred to similar cases which had been under his care but which he had not operated upon.

Mr. CLEGG also showed two children about eight years of age on whom he had operated for Cleft Palate some four years before; in both instances the voice had been very materially improved. — Messrs. Rawdon, Harrisson, and Murray made remarks.

Mr. BARK read a note on Rhinoliths and related the case of a woman aged twenty-six, seen in November, 1893. She complained of blockage of the right nostril, purulent discharge, frontal headache, and epiphora. These symptoms had been coming on for three years. After cocainising the right nostril a jelly-like mass could be seen on the floor of the nose, with white calcareous points shining through it. The mass was immovable, being firmly embedded in granulations. Under chloroform considerable force was required to extract the stone. The granulations were subsequently removed by the cold snare and galvano-cautery. The patient made a good recovery. Mr. Bark said that nasal calculus was a sufficiently rare condition to make it advisable to report this case. He entered at some length into the causes for the formation of these stones and the way in which they could be best detected.—Dr. PERMEWAN made some remarks on this paper.

Mr. DAMER HARRISSON read a note on the Treatment of Delirium Tremens. He referred especially to the violent mania which sometimes occurred in robust drunkards after injury or otherwise. He advocated a return to the plan introduced by Graves of first depressing the patient by antimonial wine and then giving narcotics, but he preferred chloral rather than opium. Dr. Macfie Campbell, Dr. Rawdon, Mr. Nicholson, Dr. Carter, Dr. J. Wiglesworth, and the President discussed Mr. Harrisson's paper.

Dr. IMLACH read a paper on Modern Miracles of Healing. He brought forward five women, all of them examples of the Holywell cure. One of them had been in the Royal Infirmary upon two occasions, each time for a month, with swelled right leg; she was told that there was plugging of the lymphatics, and upon the board at the head of her bed the disease was entered as elephantiasis. The swelling began in the ankle and rose above the knee. Rest, massage, bandaging, and other treatment having proved useless her parents took her to Holywell last autumn; after bathing in the water the swelling began to disappear, and was gone in a few days. A photograph of the swollen leg was shown to the meeting. Another cure which had been under Dr. Oliver of Newcastle-upon-Tyne, and had been already described in THE LANCET,[1] was carefully examined by those present at the meeting. There were also three examples of chronic rheumatism. Previously to their visit to Holywell they had been for many years martyrs to rheumatism and all medical treatment failed to relieve them. They had all been cured by a visit to the well last autumn and had passed through the severe winter without an ache or pain. Dr. Imlach thought that to question miracle was mere foolishness, and to question the cure was impossible. What remained was to determine scientifically *what* was cured, and this was no easy matter. He referred to the cures at Lourdes and expressed a hope that medical men would assist in investigating the actual worth of the Holywell recoveries. An interesting discussion followed the reading of the paper, in which the President, Dr. Sumner, Dr. Glynn, and Mr. Head took part.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF OBSTETRICS.

The Treatment of Severe Hæmorrhage by the Infusion of Normal Saline Solution.—Exhibition of Specimens.

A MEETING of this Section was held on March 29th, Dr. R. D. PUREFOY, the President, being in the chair.

Dr. GLENN, having expressed his indebtedness to Dr. Smyly, briefly described the five methods of using Normal Saline Solution in Severe Hæmorrhage—namely (1) Munchmeyer's injection into the connective tissues; (2) Ponfick's

[1] THE LANCET, March 16th, 1895.

intra-peritoneal infusion; (3) rectal injections; (4) intra-venous infusion; and (5) intra-arterial infusion, either centripetal or centrifugal. Munchmeyer's method he considered too slow, but recognised the value of the accompanying massage, especially when applied to the abdominal walls, as the large reserve of blood held by the abdominal veins is thus encouraged to flow towards the heart. Intra-peritoneal infusion was employed in several laparotomies, three or four pints of normal saline solution being left in the peritoneal cavity with markedly good results; the patients recovered with exceedingly slight shock considering their loss of blood, the only special feature being an intense thirst which persisted for twenty-four hours. Rectal injections can be employed at the will of the operator at any time during an operation. These methods, though useful, have in no degree the value of the remaining two—intra-venous and intra-arterial infusion—at least so far as the immediate treatment of profuse hæmorrhage is concerned. Having glanced at transfusion of blood and its difficulties when employed in private practice, he quoted Jennings's conclusion: "We know that blood excels saline fluid on nutritive grounds, but the dynamic effect of the operation being that generally required to restore suspended animation, saline fluid will usually be found sufficient." Sir Spencer Wells first suggested the infusion of normal saline solution in England, founded on experiments during the cholera epidemic of 1848. Landerer and Bischoff in Germany—Jennings, Arbuthnot Lane, and Herbert Spencer in England—were its pioneers. The apparatus used in Dr. Glenn's cases was one made by Collin of Paris, and was found admirable, being simple, easy to work and to keep aseptic. The rate of injection was recommended to be three ounces per minute as a maximum, on the authority of Panum. "Slowly and regularly" is generally the most important thing in the operation. The temperature will depend on the apparatus used, as allowance must be made for cooling in passing through. The quantity depends on individual requirements; certainly we should go on until a slowing of the pulse with an increase of volume is noticeable. Worm-Muller has shown that an increase of blood to the extent of four-fifths of the normal amount can be borne without injury to the individual into whom it is injected. The injection of large quantities has been followed by more favourable results than were obtained when smaller amounts were employed. Horrocks used two to six pints, Herbert Spencer one and a half to two pints, Bernard Pitts two to eight or ten pints, while in Dr. Glenn's cases eight pints were the maximum; the addition of alcohol is of no benefit. The advantages of arterial infusion in fat anæmic patients were pointed out, the stimulation of the medulla oblongata by the centripetal method being emphasised. The absolute importance of all bleeding points being secured was dwelt upon, and a warning was given against over-hastily using it in post-partum hæmorrhage. Dr. Glenn then read notes of seven cases of the use of this method in gynæcological practice, in three of which the patient recovered.—Dr. TWEEDY said that he had seen most of the cases infused, and had himself infused eight other cases. He agreed with Dr. Glenn as to the enormous improvement that took place in the patient's pulse and appearance, but considered it to be very transitory. He believed that the saline infusion acted as a stimulant to the heart, and that it had saved several lives by warding off impending syncope. It, however, flowed out of the vessels nearly as quick as it went in. There were free urination and perspiration. In one case fluid poured from a drainage-tube in the abdomen ten minutes after infusion. A patient very rarely dies from absolute want of blood; it is shock that kills her. Nearly as many blood corpuscles have been found in a woman who died from hæmorrhage as in a chlorotic girl. The patient dies because the heart is too sluggish, not because it has nothing to contract on. He had used a simpler instrument than that shown by Dr. Glenn. If he was not absolutely sure of his asepsis he would not ligature the vein, but would only put on a compress and bandage, following Dr. Stoker's advice.—Dr. A. SMITH had seen several cases infused with saline solution, but only with temporary improvement. He had done it two or three times himself. In one case the ligature had slipped from an ovarian pedicle. The patient was very collapsed. He reapplied the ligature and put saline solution into the abdomen, and found slight improvement, which died away very soon. He then put the patient in an exaggerated Trendelenburg's position and got great improvement. The patient recovered. He looked on the case as one of auto-infusion. He had another very similar case in which Trendelenburg's position seemed to do a great deal of good. He was not a strong advocate for transfusion. He thought the principal question was, "When to transfuse?"—Mr. S. M. THOMPSON said that he had seen transfusion used in 1868 for cholera. There was great temporary improvement, but the patients never recovered.—Dr. BATE mentioned that in Berlin six months ago he had seen a case of miscarriage in which two or three pints of saline solution were put into the breast, distending it enormously. He examined the breast two or three days afterwards and found that it had quite regained its normal size. The patient derived great benefit from the injection and recovered.—Dr. SMYLY said that he remembered Dr. Beatty reading a paper on a case in which Dr. Robert MacDonnell had infused defibrinated blood; the woman made a good recovery. When assistant in the Rotunda he saw transfusion performed, followed by death from pulmonary embolism. He had no hesitation in saying that the present was a very great improvement on the old method. He had not seen any evil results follow from the salt-and-water method, and patients had recovered whose condition appeared to be hopeless. In answer to Dr. Smith's question of "When to transfuse?" he would say, "When in doubt, operate." Salt-and-water was the best stimulant that could be given. He had had one patient transfused simply for shock and not for loss of blood. He thought that the credit of reintroducing this method in Dublin was altogether due to Dr. Glenn.—Mr. LANE agreed with Dr. Tweedy and Dr. Smith in the nature of the temporary effect produced in the majority of cases of transfusion. He had seen Dr. Macan use an instrument very similar to Dr. Tweedy's, but provided with a graduated glass jar, which was an improvement. If the effect of the saline infusion was only to stimulate a sluggish heart the question would have to be considered whether alcohol or some other stimulant would not do as well.—The PRESIDENT said that the first successful case of transfusion occurred when he was at the Rotunda. It was done by Dr. R. MacDonnell, and one of the students furnished the necessary blood, eight ounces, which was defibrinated. A much smaller quantity was used than is used now. It was when a secondary collapse had set in, several hours after delivery, that the transfusion was done.—Dr. GLENN, replying, said that as regards the quantity infused he thought the present results, in which pints instead of ounces were used, were more favourable. Other stimulants, as alcohol and ether, were always used in conjunction with infusion of saline solution. He considered the instrument used by himself to be superior to Dr. Tweedy's. The latter would require nine feet of tubing if the infusion was into an artery, but in his he could get the necessary pressure with the syringe. In Dr. Smith's cases the elevation of the legs could not have been the cause of the patients recovering, considering the very small amount of blood in the legs. The advantage of Trendelenburg's position was that the abdomen was raised and pressure applied to it. The manner of infusion described by Dr. Bate was merely Munchmeyer's method into the connective tissue. It was an unsatisfactory method, as it was too slow. Infusion was very unsuccessful in cholera.

Dr. SMYLY exhibited specimens of Uterine Myoma, Epithelioma of the Cervix, Double Pyosalpinx, Interstitial Salpingitis, and Ovarian Cystoma.

Dr. F. W. KIDD exhibited a Submucous Fibroid removed from the Uterus by enucleation.

SECTION OF PATHOLOGY.

A Rare Tumour.—Fibro-myxoma of Tongue.—Dentigerous Tumour of the Neck.—Orbital Tumour.—Malignant Disease of the Ear.

A meeting of this Section was held on April 5th, Dr. J. A. SCOTT, the President, being in the chair.

Dr. PARSONS read a paper on the Microscopical Section of a Rare Tumour.—Professor M'WEENEY thought that the growth was justly called a cylindroma, but that it did not belong to that class which occurred from hyaline degeneration of the bloodvessels, because the hyaline strands were very closely placed together, and there were very few cells. He had himself seen only one case of cylindroma. It occurred in the hard palate and was adherent to the bone. It was removed six times, recurring each time.—Dr. PARSONS agreed with Professor M'Weeney that the tumour must first have been very vascular. It was three years since the tumour was removed, and he had not seen the patient since.

Professor M'WEENEY showed a Fibro-myxoma, an encapsuled, translucent, yellowish tumour about the size of the kernel of a hazel-nut, removed from the tongue of a man aged twenty-three years. There was no history of syphilis, either congenital or acquired. Histologically examined after fixation in Foà's reagent, the tumour proved to be a fibroma, with here and there so much structureless or faintly fibrillated ground substance as to justify the name myxoma.

Professor M'WEENEY also showed a Congenital Dentigerous Tumour removed from the left side of the Neck of a woman aged twenty-three years. The tumour, which was small at the time of birth, had increased steadily until, at the time of operation, it had attained the dimensions of a good-sized orange. It was subcutaneous, with deep attachments, and sprang from the level of the hyoid bone, to which it was adherent by a sort of process. To the naked eye it seemed made up of a dense fibroid stroma, in which were embedded numbers of cysts, averaging the size of a pea, filled with mucoid material. The trabeculæ between these cysts were dense and thick, and contained many bars and nodules of cartilage, as well as several immature-looking teeth. In the growth were also calcified corpora amylacea and other structures of a doubtful nature.

Mr. ARTHUR BENSON and Mr. GRAVES communicated the notes of a case of Orbital Alveolar Sarcoma in a man aged fifty-five years. The growth seemed to start from the region of the lacrymal sac and was about the size of a small hen's egg, hard and lobulated. It protruded forwards in the region of the left lacrymal sac, and over it the skin was tense, thin, and adherent on the apex. The eye was pushed forwards and outwards to a considerable extent. The fundus of the eye was normal, and the motions of the globe were but little impaired. After removal of the growth the eye returned almost to its normal position when the wound healed.

Mr. STORY described a fatal case of Malignant Disease of the Middle Ear, the first he had observed in eighteen years, during which period over 12,000 aural cases had come under his observation at St. Mark's Hospital. The patient was a man about thirty years of age from whose middle ear a polypus was removed in September, 1894. The polypus returned again and again after removal, necrosis of part of the temporal bone showed itself, and the patient finally died from exhaustion within six months after the removal of the first polypus.—Professor SCOTT showed microscopic sections of the tumour in the ear and of a secondary growth in the neck, both of which he regarded as sarcomatous.—Dr. BENSON said he saw the case before the present diagnosis was arrived at, and the idea of malignant growth had never occurred to him. At that time it looked very like a severe case of mastoid implication as a sequence of middle-ear disease.—Mr. STORY, replying, said that before the microscopical examination was made he thought it was probably an epithelial growth. The patient died, not from perforation of the malignant growth into the cranial cavity, but from exhaustion, with difficulty in deglutition, which came on simultaneously with loss of speech.

Reviews and Notices of Books.

The Evolution of the Diseases of Women. By W. BALLS-HEADLEY, M.A., M.D. Cantab., F.R.C.P. Lond., Lecturer on Midwifery and the Diseases of Women at the University of Melbourne, &c. London: Smith, Elder, and Co. 1894.

THIS is in many ways a somewhat exceptional and bewildering book, if we are to regard it, as we suppose we must, as belonging to medical literature. The author is a teacher of midwifery and of the diseases peculiar to women at the University of Melbourne—that is to say, of two subjects essentially practical—and it might have been expected that a work by him on the Diseases of Women would have dealt with this subject practically, in a manner that would have afforded help to the practitioner who has to recognise these diseases and to relieve them as far as the present state of our knowledge permits. On the other hand, if the author desired to write a work on political economy, or on social questions, and more especially on the relation between the sexes, it was obviously unnecessary to attempt to combine with it a book on the Diseases of Women. Such familiar works as "Esther Waters" and "The Woman Who Did" are examples to the point. It seems better to leave questions of social philosophy to the novelist rather than to combine them with the teaching of matters strictly medical. In the preface we read: "Evolution is the mode of progress of the world. Nothing is, that is not the gradual development of events. Progress for good or evil is the sequence of Nature. The destruction of a nation is the culmination of the effects of destructive agents. Death, except when solely from accident [is an accident 'the gradual development of events'?] or effluxion of time, is but the manifestation of undue waste of vital action, the neglect of an evident causation. It is an evolving destruction. In woman this is peculiarly apparent. Her life, as woman, is a wonderful vicissitude. Her destruction comprehensible, prognosticable, remediable." Chapter I. deals with the relation between the sexes. On page 2 we find a paragraph on dolls, which though, no doubt, true enough, and in some respects interesting, is scarcely gynæcology. We take exception, however, to the statement that boys do not play with dolls. Up to a certain age they certainly not unfrequently appear to enjoy playing with them as much as little girls do. The late Dr. Matthews Duncan began one of his clinical lectures with the words, "Who in this world can say what anyone means by endometritis?" This is how Dr. Balls-Headley defines it: "Endometritis is an evolutionary inflammation of the membrane lining the uterus, and though frequently affecting this structure throughout the organ may be of the cervix only, or of the body, the condition differing in accordance with the variation in the anatomy of these parts and the manner of the causation. This is the central essential disease in evolutionary pathology, is exceedingly common, and is worthy of the utmost consideration." In giving the symptoms of cervicitis the author says: "There is sterility when the canal is blocked by the cohesive mucous plug." Has anyone ever seen an os uteri that was not occupied by a cohesive mucous plug? We think not; and we doubt if anyone has ever seen the os uteri blocked by it. As regards the prognosis of this condition he says: "The prognosis is that the disease will be continuous with evolutionary progress if not surgically treated, and sterility, except in the mildest cases in which the disease is not really confirmed, is certain." It is difficult to understand what is meant by the first part of this, but the latter part—that sterility will be certain in cases where the cervical canal is occupied by adhesive mucus—appears to us quite at variance with the general experience. Indeed, the use of the word "blocked" is an index to the kind of way in which the author combines statements of fact with statements involving a theory that may or may not be true. To say that there is always mucus present in the cervical canal normally is a statement of fact; to say that the canal is "blocked" by such mucus involves the view that it exercises a detrimental influence in some way or other—a view that is, in the opinion of the best authorities here, altogether incorrect. An example of the author's system of reasoning is afforded by the following quotation, in which it will be seen that endometritis is ascribed to overdress: "The evil of overdress is apparent; but it is due to the deficiency of marriage and the misapplied competition of attraction. At first the young girl, with inherent instinct, properly expects that the attraction of her sex, as in the case of the birds she sees, and of all creatures, will be sufficient to insure her a mate. No mate offers. She attempts to increase her attraction, and spends all her money on adornment. Still she is unwed. Time advances; she buys bonnets, dresses, bangles, white and tan shoes; and, if comparatively poor, is perhaps deficient in underclothing; she is dressed far beyond her station, and therefore that of her probable husband, frightening such men from her side.

..... She finally grows thin and atrophies—a wasted woman—and in future, should she be dependent on her own exertions, as are so many women in this age, a drudge to sustain her body in food, unselected, and hopeless: and evolutionary disease, such as endometritis, may ensue." And again, in the chapter on the Granular Os—by which, we suppose, is meant the slight erosion round the os uteri, so commonly seen that, in its slighter degrees at all events, men of moderate views have come to regard it as scarcely pathological—"endometritis occurs by the chronic congestion of unsatisfied passion with exacerbations." The author is of opinion that "no woman with granular os is free to the last days of her life from the risk of super-development of malignancy on the granulations." There is no sort of scientific evidence that there is a causal relation between slight erosions of the cervix and malignant disease, and the sentence we have quoted is only true in so far as it implies that no woman at all is free from the risk of malignant disease. The book is full of similar instances of loose reasoning. So far as we are able to follow the author it appears that he ascribes nearly all the ills to which female flesh is heir to unsatisfied sexual passion, aggravated by tight-lacing, forgetting how frequently in actual practice we find that the patient enjoyed perfect health till she married, and how often all her troubles are found to date from then. We know, or if we do not it is not for want of frequent telling, that statistics may be made to prove pretty well anything; but their power in that respect sinks into insignificance compared with a system of reasoning that assumes whatever is necessary for the argument—a system by which the author has satisfied himself that slight erosions lead to cancer, that endometritis is due to overdress, and that subinvolution of the uterus may be the cause of diabetes.

Cod-liver Oil and Chemistry. By F. PECKEL MÖLLER, Ph.D. London: Peter Möller, 43, Snowhill, E.C. 1895.

THE curious title of this book would suggest that the author had conceived in his mind the utility perhaps of presenting to the reader a mental lubricant as it were before he is brought to grapple with the difficult subject of architectural chemistry, which is subsequently dealt with, and which occupies by far the greater portion of the volume. In that sense there seems to be no reason why we should not expect the issue of similar works with "castor oil and chemistry," "eucalyptus oil and chemistry," and so forth, for their titles. The fact is, the author is a consummate exponent of the theories of chemical constitution, and a good writer, while at the same time he possesses an interest in the cod-liver oil industry; he was not content, therefore, with giving a dissertation merely upon the chemistry of cod-liver oil, but also pure chemistry—a task which a perusal of the second portion of the work will show he was well qualified to undertake. Hence we welcome both contributions, despite the fact that we are inclined to suggest—so excellent is the treatment of both sections—that they might have been separated into two distinct volumes. To cod-liver oil the author devotes 111 pages, each lettered in Roman numerals after the manner of a preface. The account of Norway, its history, geography, its people, and their customs and habits, which involves a reference to the temperance problem, is full of interesting and entertaining reading, enlivened now and again as it is by a drollness and witticism of method which is occasionally employed even in the treatment of more occult things. Chapters on the various fisheries of which Lofoten is the centre follow, until in Chapter XLIII. the reader is presented with an excellent account of the manufacture of cod-liver oil, the modes of dealing with the fresh liver, and the various processes used for the extraction of the oil. Peter Möller's process (that of a relative, we presume, of the author), by which all the disagreeable and detrimental qualities of the oil due to decomposed albumens were removed, was first introduced in 1853, and consisted in the treatment and extraction of the perfectly fresh liver by means of steam. The oil so obtained was a vast improvement, inasmuch as it was clear in colour, practically free from nauseating taste and smell, and consequently, as the author puts it, "a thing of delight from the consumer's point of view" and "an improvement of no small importance from the doctor's point of view." Next in order succeed a useful pharmaceutical chapter and an important chronological synopsis of chemical researches on cod-liver oil, together with new chemical researches contributed by P. M. Heyerdahl, than whom there is no greater authority on the composition and constitution of cod-liver oil. The author scouts the idea of the value of cod-liver oil being due to certain so-called "active constituents," as, for instance, certain alkaloidal bodies which have been isolated, so it is stated, from the liver, but which he says are not "normal constituents of pure cod-liver oil, inasmuch as valeric, cupric, and gadinic acids, gaduin, ammonia, trimethylamine, alkaloids, and such substances are partly decomposition products, formed in the hands of the analyst whilst conducting his operations, and partly products of bacterial activity after the oil has left the hepatic cells." His view, on the other hand, that cod-liver oil acts not by influencing the tissues, but by becoming part and parcel of them, or in other words by being simply food substances which in one way or another possess special advantages distinguishing them from other and ordinary foods, thus justifying their adoption as therapeutical agents, is, we think, the correct one. And, as he aptly puts it, "to attempt to find some such body in cod-liver oil is just as likely to be successful as would be an endeavour to find an active principle in, say, bread."

Part II. is a very remarkable production and treats of the law of atomic linking. We use the word "remarkable" because this section simply bristles with an excellent series of diagrams illustrative of the architecture of complex organic substances. The author offers an apology in the introductory remarks which we cannot accept, because, as we would assure him, it is wholly unnecessary. He refers to the "good old days" when "doctors calmly poured drugs down their patients' throats without knowing or much caring to know anything of their nature." "This simple method is now supposed to be rather out of date, and certainly the more intimate a physician's knowledge of his remedies the more likely is he to use them successfully." He then cites as an illustration the subject closest to his interest—cod-liver oil. Thus, owing to Heyerdahl's researches, already alluded to, it has been shown that "the views hitherto held regarding the nature of cod-liver oil are quite erroneous, and that we must now look upon that remedy in an entirely different light." Again, "without a certain intimacy with the views and theories of modern chemists and physicists it is impossible to understand or appreciate these and similar researches, and if anything in the following pages makes it easier for the busy practitioner to get at and grasp the facts of organic chemistry, then the writer's aim will have been fully accomplished." Could a writer possibly have any worthier aim in view? Anyone who cares at all for the advance of medicine, especially therapeutics and pharmacology, will not only thoroughly approve these observations, but will be grateful to Dr. Möller for the enormous labour he must have expended in his endeavour to show, in the most graphic and intelligible way, how a knowledge of the constitution of bodies generally must eventually place the administration of remedies on a more real and scientific basis, and so give the practitioner a stronger hold than ever over the mysteries and ravages of disease. We cordially commend this unique and clever work to our readers.

MAGAZINES FOR APRIL.

THE April number of the *Veterinary Journal and Annals of Comparative Pathology*, like the preceding numbers for the year, gives evidence of the change of editorship which took place in the early part of the year. Especially is this the case in the purely editorial department. The first article is an essay on Diseases Communicable from the Lower Animals to Man, read before the Edinburgh Medical Society by Mr. R. Peech, in which are considered some points in the history of the anthrax, glanders, and tubercle bacilli. A case of Pleuro-pneumonia of the Horse by Mr. F. B. Byrne is described, whilst the same author contributes a note on Laburnum Poisoning, and indicates that an oleaginous aperient followed by demulcents and stimulants is perhaps the best treatment for this condition. Other papers, on Albuminuria in Cattle, by Edward H. Curbishley, M.R.C.V.S., and Simple Contusions and Some Sequelæ by Peter Moir, M.R.C.V.S., complete this portion of the journal. The editorial article is occupied with a discussion on Board of Agriculture appointments and examinerships and the advisability of keeping these confined to members of the veterinary profession. As, however, the question is discussed much more fully in the reports of the societies, where a good deal of feeling seems to have been engendered, the article may be simply a *résumé* of the feeling of these societies. A paper on Biliary Cirrhosis of the Liver in Cattle (Pictou Cattle Disease) by Dr. Wyatt Johnston is reported together with a discussion in which Dr. Brydon and Dr. McEachran take part. An interesting note on the late Joseph Gamgee is also given. Reviews, which are not so numerous as usual, and reports of societies make up a sufficiently interesting number.

The *Veterinarian* for April, 1895, like its colleague, the *Veterinary Journal*, affords internal evidence, in addition to that contained on the cover, of a change of editorship. Both of the journals are now edited in Edinburgh. We have evidence of this in the number of the *Veterinarian* before us in the fact that the first two papers are both by Edinburgh authors, one entitled "Telegony," by Professor C. Ewart, on Lord Morton's well-authenticated experiments with breeding from the Arabian horse and the quagga. We are glad to see that Professor Ewart intends to repeat these experiments, and if they are successful they will be a severe blow to the theories of Weissmann and his school. Professor Mettam contributes an interesting paper on the Rudimentary Metacarpal and Metatarsal Bones of the Domestic Ruminants. Mr. J. A. W. Dollar has an interesting paper on Luxation of the Patella, in which he maintains that the patella is, as a rule, not truly displaced, but only retained at a certain point of its ordinary travel; where displacement does occur, however, it is always outwards, and must be accompanied by injury of the internal lateral ligament. Editorial notes and clinical cases, followed by abstractive notes and reviews, complete the number, from which it may be gathered that the *Veterinarian* under its new editorship is likely to be as vigorous as it has been during any period of its existence. An entirely new departure has been made in this number, as, by an arrangement with the editor of the *Veterinary Record*, which appears weekly, the reports of the various veterinary societies are reprinted, not in the body of the journal, but as a kind of supplement, so that although they do not form a part of the journal they may be kept as a permanent record of the proceedings of the different societies. This is an exceedingly good arrangement and one that might well be adopted in other monthly journals, the supplement being paged consecutively and perfectly separate from the body of the journal.

Archives de Physiologie. Publiées par MM. BOUCHARD CHAUVEAU and MAREY, 5ème Série, T. vii., No. 2. Avril, 1895.—The chief articles contained in this number of the *Archives* are: 1. Experiments on Pancreatic Diabetes and the Mechanism of the Regulation of Normal Glycæmia, by M. M. Kaufmann. In this article M. Kauffmann shows that the division of the nerves of the liver does not materially modify normal glycæmia, and that some material is produced by the pancreas which either acts directly on the liver or on the tissues generally. 2. A Study of the Auscultation of the Respiratory Apparatus, by M. E. Castex. In this memoir the author endeavours with some success to give a scientific explanation of the various respiratory sounds. 3. Researches on the Mechanism of Organic Oxidations, by MM. J. E. Abelous and G. Biarnès. 4. New Researches on the Influence of Intra-vascular Injections of Peptone on the Congulability of Blood in the Dog, from which it appears that in dogs rendered immune against the anti-coagulating power of peptone the intravenous injection of this albuminoid no longer prevents the coagulation of the blood, because the organism of these animals no longer secretes under the influence of the peptone the substance which renders the blood incoagulable, and which probably proceeds from the liver or the intestines, by M. Contejean. 5. On the Variations of Temperature and of the Degree of Vaso-dilation in Diphtheritic Intoxication Artificially Induced, by MM. J. Courmont and M. Doyon. 6. Variations in the Virulence of the Poison of the Viper, by MM. C. Phisalix and G. Bertrand. Variations were observed which were associated with the locality where the viper was found and the season of the year in which the poisons—echidnase and echidnotoxine—of the viper were injected. 7. On the Mode of Action of the Nervous System upon the Production of Hyperglycæmia, by M. Kauffmann. 8. On the Elimination of Iron by the Urine, by M. Louis Lapicque. 9. On the Innervation of the Thoracic Duct, by MM. L. Camus and E. Gley, showing that this duct receives both constricting and dilating nerves from the great sympathetic. 10. On the Variations of Blood-pressure in the Veins, by M. C. Delezenne, showing the very curious inverse relation which exists between the pressure in the renal and femoral veins. 11. On the Influence of the State of Sensibility of the Stomach on Gastric Chemistry, by MM. Paul Sollier and E. Parmentier. 12. On the Effects of Total Extirpation of the Stomach (in the Cat), by MM. Carvallo and V. Pachon. 14 Effects of Thyroidectomy in Reptiles, by Dr. H. Cristiani. 15. On the Toxicity of the Urine after Thyroidectomy, by Dr. Paul Masoin. 16. On Inhibition of the Tone and Movements of the Stomach in the Dog, by M. Maurice Doyon. 17. Trophic Changes in Cells dependent on Bacterial Secretions, by M. A. Charrin. 18. Fibrinolysis, by M. A. Dastre.

The Journal of Physiology. Edited by M. FOSTER, M.D., F.R.S., and J. N. LANGLEY, F.R.S. Vol. XVII. No. 6. April, 1895. London: Clay and Sons.—The principal contents of this part, in addition to the short accounts of the Proceedings of the Physiological Society, are:—(1) J. W. Pickering: Notes on the Action of Chloro- and Cyano-caffeine; (2) J. A. Menzies: On Methæmoglobin, with a plate, and (3) on the Action of Certain Acids on Blood-pigment; (4) Dr. Sydney Ringer and Arthur G. Phear: the Influence of Saline Media on the Tadpole; (5) E. Waymouth Reid: Electrical Phenomena during Movements of the Iris, with an illustration; (6) Dr. Archibald Garrod: A Contribution to the Study of Uroerythrin, with a plate; (7) Arthur Edmunds: the Effect of Saturating Normal Urine with Certain Neutral Salts; (8) W. T. Porten: the Path of the Respiratory Impulse from the Bulb to the Phrenic Nuclei, with eleven illustrations.

The Ophthalmic Review. Edited by Mr. J. B. LAWFORD, Dr. MACLEHOSE, Dr. GROSSMANN, Mr. PRIESTLEY SMITH, Dr. JOHN STORY, and Dr. EDWARD JACKSON. London: J. & A. Churchill. — This number contains a paper by Mr. Ernest Maddox, entitled Simple Optical Notes, in which a useful method of testing the strength of concave glasses is given, followed by an interesting note on the Aberration of

the Eye. Dr. W. George Sym describes a case of Lenticonus Posterior, and Mr. James W. Barrett records a case of damage to vision caused by watching an eclipse of the sun.

Analytical Records
FROM
THE LANCET LABORATORY.

(1) FERRATIN. (2) LACTOPHENINE.

(C. F. BOEHRINGER & SOEHNE, WALDHOF, NEAR MANNHEIM. LONDON: DOMEIER & CO., 13, ST. MARY-AT-HILL, E.C.)

FERRATIN is being introduced as a new iron derivative of acid albumen which may be obtained by extraction from pig's liver. It is, however, artificially prepared from egg albumen and chemically pure iron salts held in alkaline solution. Both artificial and natural ferratin occur in the form of a fine powder of rusty colour, odourless and tasteless. It contains 7 per cent. of iron, and it does not act injuriously, it is stated, on the teeth, while it is rapidly absorbed and said not to interfere with the digestive functions. The specimen we examined proved very slightly soluble in water, the solution being of a pale-yellow colour, which, when agitated, frothed in identically the same way as solutions of egg albumen. On adding hydrochloric acid to the powder, perchloride of iron is at once formed, and albuminous flocks are thrown out. On adding caustic soda to this acid liquid the reverse action takes place—that is, the iron is thrown out as perhydrate, and the albumen dissolves to form albuminate. Heated on platinum foil, ferratin emits a powerful smell of burnt feathers, and after a time pure ferric oxide remains. The constitution of ferratin is sufficient reason for believing it to be of the greatest service in anæmia and other conditions of blood impoverishment in which iron is indicated, and we are hardly surprised to learn on this score also that excellent clinical results of its use have been recorded.

Lactophenine is described as a new antipyretic and antineuralgic, acting in general like phenacetin, but possessing over the latter the additional advantage of a permanent soothing effect. It is a phenetidine, being a lactic acid derivative of para-phenetidine, in which the acetic acid attached to the ammonia residue has been replaced by lactic acid, so that it might be properly called lactylphenetidine. It is a white crystalline powder not unlike phenacetin, sparingly soluble in cold but freely soluble in hot water, from which it crystallises on cooling. Like antipyrin and phenacetin, it is said to cause a rapid reduction of the temperature of the body, especially when it has been artificially raised. At the same time, however, lactophenine produces a state of hypnosis and diminishes considerably the sensitiveness to painful influences. In rabbits, even sensation and voluntary movements may, according to Dr. Jaquet,[1] be completely abolished, and the reflex excitability nearly so, without respiration and heart action being perceptibly affected. Although phenacetin has a similar soothing effect, it appears to be exerted to a much greater degree when lactophenine is substituted, the effect observed on animals calling to mind a urethane narcosis. It has been used with good effect as an analgesic in migraine, nervous headache, rheumatic trouble, and in the neuralgia of influenza.

[1] Correspondenzblatt für Schweizer Aerzte in Basel.

BEEF EXTRACT TABLETS.

(J. CHRISTIE RENNICK, BOND COURT HOUSE, WALBROOK.)

These tablets will be found convenient for the extemporaneous preparation of soup. It is particularly satisfactory to find that the maker is alive to the great importance of using meat fibre as alone affording in a preparation of this kind a source of nourishment, the extractives of beef serving merely as stimulant and restorative, much in the same way as a mixture of spirits and water. Microscopic examination thus revealed the presence of muscular fibre. Analysis gave the following results: moisture, 18·30 per cent.; meat extractives and fibre 75·8 per cent., containing 11·13 per cent. nitrogen; ash, chiefly phosphate, 5·90 per cent. The tablets represent, therefore, a concentrated and convenient form of food, each (1 oz.) being sufficient to make on simply stirring in boiling water for about five minutes one pint of good, palatable, and nourishing soup.

(1) MALT EXTRACT JELLY (MALTO-PEPTONE). (2) MALT EXTRACT JELLY (MALTO-PEPTONE) WITH COD-LIVER OIL.

(MALTO-PEPTONE CO., 101, LEADENHALL-STREET, E.C.)

The sticky consistence of malt extract preparations, excellent though they are in all other respects, has undoubtedly proved an obstacle to their exhibition in many instances, and the presentation, therefore, of these valuable therapeutic agents in the form of a firm and attractive-looking jelly is a fact which many practitioners will welcome. We have recently submitted to examination specimens of both malto-peptone malt-extract jelly, and the same combined with cod-liver oil, with very satisfactory results. We find that the jellification process does in no degree affect the standard malt value of the preparation—indeed, the degrees of concentration and of digestive activity are not in the least respect inferior to malt extracts of established repute, although it is evident that some small quantity of a jellifiable substance must be introduced to make a jelly of the extract. This is substantiated to some extent by the fact that in our experiments we succeeded in separating a small quantity of gelatine. We regard this improvement as an introduction in practical medicine of considerable importance, since it is calculated to induce the easy acceptance of a valuable remedial agent the stickiness of which frequently proves obnoxious to many patients.

FERRET BRAND POLISH SOAP.

(GRIMER, MORTON, AND GODDARD, BOTOLPH HOUSE, EASTCHEAP, E.C.)

The combination with soap of a mechanical detergent is very effective both for cleansing and polishing purposes. This is broadly the basis of Ferret brand soap, since on treatment with boiling water a clean, white, insoluble silicious residue may be separated, while soap enters into solution. It is obviously useful for a variety of purposes, amongst which may be reckoned the cleaning of the door-plate and of harness; it does its work well.

KATHREINER'S MALT COFFEE.

(C. M. PATTENHAUSEN, 40, GREAT TOWER-STREET, E.C.)

While we are not disposed to admit some of the statements contained in a pamphlet relating to these preparations—as, for instance, that "coffee is one of the greatest evils that exist" because it contains "a rather considerable portion of the strong poison caffeine" (or coffeine, as it is misspelt)—yet coffee substitutes are doubtless acceptable, assuming of course that the flavour and aroma are equally pleasing, to not a few who cannot tolerate, through some susceptibility, the original article. The above preparation seems to us to have really secured these advantages for the first time. It consists of dark-brown malt berries, sticky to the touch and exhaling the agreeable aromatic smell of freshly roasted coffee. About one-third part is, we find, soluble in hot water, yielding a pleasant-tasting liquor very closely resembling genuine coffee infusion. As a result of roasting, much of the original starch of the malt has been converted into dextrine (torrefaction), while part of the albuminous substances is no doubt to some extent changed into certain aromatic bodies. The decoction may be regarded as possessing dietetic properties superior to coffee, for

it contains part of the nourishing constituents of malt; but in regard to stimulating effects it can obviously possess no value referable to caffeine, although it is very probable that certain other stimulating substances are developed during the roasting process. On the whole, therefore, we regard the preparation as a probably valuable addition to this class of beverage and food; it is certainly a satisfactory coffee substitute.

FAVARA'S JUICE OF THE GRAPE (MOSTI DI SALUTE FAVARA).
(O. FAVARA AND CO., 52, LEADENHALL-STREET, E.C.)

This preparation is described as consisting of the juice of grapes pressed out of the sweet ripe grapes in the cold by a special process and then concentrated. It is a dark-red somewhat viscid fluid, which when diluted with water possesses the peculiar sweet and agreeable flavour of the dark variety of grape. It is said further to be sterilised, non-alcoholic, and unfermented. This we quite believe, although it is not surprising that in our analysis we found a small proportion of alcohol. Thus, on distillation the density of the distillate proved to be 0·9983, which would be equal to 0·89 per cent. alcohol by weight, 1·13 per cent. by volume, or 1·97 per cent. proof spirit in the original fluid. The expressed juice of the grape is, of course, so susceptible to fermentative change that it would be remarkable to find it absolutely free from alcohol. As will be seen, however, the quantity is small and quite negligible on "temperance" grounds. The solid matters, amounting to 65·16 per cent., consisted chiefly of grape sugar and the characteristic constituents of the fruit; the mineral matter, amounting to 0·83 per cent., was quite reddish-brown from the presence of a marked amount of iron, and contained also carbonate, sulphate, and phosphate of potassium. There can be little doubt, therefore, of its genuineness, and, that being so, it may be regarded as offering in some degree the tonic and invigorating properties for which certain pure wines are esteemed. It is satisfactory to add that we obtained no evidence of injurious preservatives having been employed.

PINOZA CIGARETTES.
(LUSBY'S PINOZA TOBACCO CO., 10, MINORIES, E.C.)

The fact that the inhalation of pure pine oil is sometimes attended with benefit in certain affections of the respiratory organs has doubtless led to the idea of impregnating tobacco with the oil to effect, in a more or less agreeable way, the same thing. The Pinoza cigarettes yield a tolerable amount of oil when submitted to the action of a current of steam, the oily drops separating from the condensed water. When smoked the presence of pine oil in the mouth is unmistakable, and is not at all disagreeable. It may be true that pine oil volatilised in this way would exert a soothing effect, but we are inclined to think also that the tobacco at the same time would lead to irritation in cases of sore-throat and bronchial catarrh. The cigarettes burn remarkably well despite the presence of the oil, and the tobacco employed is obviously selected especially for the purpose. Pinoza cigarettes are also made containing a much larger proportion of oil.

(1) STANDARD MALT EXTRACT.
(2) STANDARD MALT EXTRACT AND COD-LIVER OIL.
(THE STANDARD MALT EXTRACT COMPANY, 23, BILLITER-STREET, E.C.)

It is quite admissible to apply the word "standard" to this preparation, inasmuch as we find it possesses a remarkable degree of digestive activity, being stronger in this respect than many preparations we have previously recorded. Nor is its high diastasic power gained at the expense of taste, which is excellent, being entirely free from that acidity and burnt flavour which not infrequently characterise similar preparations. This extract, as might be expected, affords an excellent vehicle for the administration of cod-liver oil, the same company's preparation representing this combination appearing as a true emulsion under the microscope, while its taste, which is pleasantly aromatic, is acceptable.

HYGIENIC COFFEE.
(THE LONDON HYGIENIC DEPÔT, 63, LAMB'S CONDUIT-STREET, W.C.)

We find that this preparation is regarded as hygienic because it contains neither *caffeine* nor chicory. It consists of a dark-brown branny substance, which doubtless yields a nourishing and wholesome enough infusion, but we cannot speak favourably of its flavour, which compares very indifferently with the agreeable aroma of freshly ground coffee. The statement that it is free from caffeine and chicory is correct, our attempts to extract the former by well-known methods being futile.

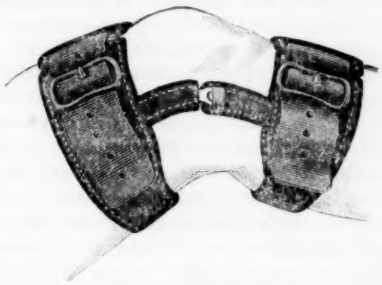
SUNFLOWER COCOA ESSENCE.
(SUN COCOA AND CHOCOLATE MANUFACTURING CO., LIMITED, NEWCASTLE-STREET, ALDGATE, E.C.)

A superior-grade cocoa free from added starch and sugar. It yields 4·20 per cent. mineral matter, of which 1·40 parts are soluble and 2·80 parts insoluble in water, while the alkalinity of the soluble portion is equal to 0·56 per cent. K_2O. There is no evidence, therefore, of the use of alkali to render the cocoa so much more "soluble."

New Inventions.

A SUPPORT FOR THE KNEE-JOINT.

A NEW pattern of support for the knee-joint has been recently brought out by Mr. J. H. Haywood, surgical appliance manufacturer, Castle-gate, Nottingham. It consists of two flexible steel bands, well padded, and secured by straps and buckles, which encircle the limb above and below the joint, and are connected by flat-jointed steel rods extending on either one or both sides of the knee, as may be necessary. In ordinary use these joints move freely, but when fixation of the knee is required they can be made rigid. It is claimed for the apparatus that it can be adapted to cases of fractured patella, and that it supports the joint without the chafing and constriction occasioned by knee-caps of other materials, such as leather. It is easily put on and taken off, either under or over the trousers, and in this respect will be useful to miners, labourers, railway men, cyclists, &c. It can be readily cleaned, it is inexpensive, and very durable.



THE PATENT PNEUMATIC VACCINATION SHIELD.

THIS is an annular cushion made of very thin indiarubber and inflated with air. The central aperture is about an inch and a half in diameter, and the thickness of the ring is about half an inch. It is extremely light and soft and is provided with three ribbons, two of which are tied round the infant's arm and the third is fastened to the sleeve of the clothing. The makers are Cole's Pneumatic Shield Company, Limited, 79, Lower Gardiner-street, Dublin.

THE LANCET.

LONDON: SATURDAY, APRIL 27, 1895.

THE probable production in man of tuberculosis having its origin in food from tuberculous animals is a question of perhaps more immediate importance to preventive medicine than any other of the numerous public health aspects of tuberculosis. We have never held that a complete solution of the many problems of this disease in man is to be found in his opportunities of infection, and we have been led to look with some reserve upon recent advocacy of preventive measures apparently based on a restricted view; but clearly if infective tuberculous matter is demonstrated to exist with any degree of frequency in food, and to be dangerous to human consumers, we have to deal with a condition of great moment to the health of the country. The issue of the report of the Royal Commission on Tuberculosis will, therefore, be studied with considerable interest. For some time prior to the appointment of the Royal Commission it had been felt by sanitarians that a careful examination of the facts would show that a regulation of our food-supply *quâ* tuberculosis was urgently demanded, and that in this matter we were already far behind the practice of public health organisations on the Continent; while, on the other hand, stock owners and others engaged in the meat and milk trades were complaining that in districts where tuberculosis was dealt with they were suffering considerable hardships for an object they scarcely understood and which they were disposed to think fanciful. Accordingly a commission of experts in public medicine and agriculture was appointed in 1890 under the chairmanship of Lord BASING, and was reorganised last year under that of Sir GEORGE BUCHANAN. We publish elsewhere an abstract of the carefully reasoned report now issued. As might have been anticipated, it leaves no room for doubt that "the actual amount of tuberculous disease among certain classes of food animals is so large as to afford to man frequent occasions for contracting tuberculous disease through his food," and states the Commission's belief that an appreciable part of the tuberculosis that affects man is obtained through food. Accepting this position as demonstrated by the inquiries referred to in the report, we would now draw attention to some of the circumstances and conditions under which this potency for harm is found to exist. As regards meat—we note that beef is principally in question—we find that the Commissioners consider that of the dangers in the dressed carcass afforded respectively by tuberculous organs unremoved, by minute tubercle in or among muscle substance, and by contamination of the surface of the meat (it may be of healthy carcass) with tuberculous matter brought by the knives and cloths of the butcher in the process of dressing, the last is much the most considerable; and they point out that, provided all tuberculous parts are removed and care is taken to secure the meat substance from contamination in dressing, a great deal of meat from tuberculous animals may be consumed without risk. The risk cannot be removed with any certainty by cooking, for tubercle in the tissues away from the surface does not lose its infectiveness in any process of cooking, neither does the tuberculous matter originally smeared on the surface that comes to be included in the centre of meat made into rolls. As to milk in the next place, the report carries conviction that there is one condition necessary for it to be infective—namely, that it must come from a cow with tuberculous disease of the udder. The Commissioners point out the means of recognising this disease, and draw attention significantly to its rapidity of onset and to its occurrence in any stage of tuberculosis in the cow; and with regard to the extreme virulence of milk, even diluted, from such a cow the reader of the report can have no doubt whatever.

The facts ascertained by the Commission are, perhaps, hardly unexpected, but they now rest upon a secure basis of inquiry and experiment. And we turn with some anxiety to consider the public health aspect of its report. In the interests of the health of the community, and particularly of children, it is clearly the duty of the State to deal with the question thoroughly. We do not minimise its administrative complexity. The problem of ensuring in practice the detection of tuberculosis in milch cows and prompt action in cases of tuberculous udder disease is by no means free from difficulty. And still more difficult is it to ensure safety in meat if it can only be obtained by skilled supervision of the operations of slaughtering and dressing. For although this report adds weight to the rightly increasing demand for public abattoirs (in which alone can the needful supervision be secured), yet it is clear that provision of them would not deal with the large class of "dead meat" that might be extensively contaminated before its importation. Nevertheless, the danger to public health shown by the Commission to exist admits of no neglect, and there can be no question that much can be done to lessen it in this country—indeed, we have only to look to the regulation of food supply in Germany and Denmark to see how much may be and already has been done in this direction. Of one thing we are convinced, that no efficient action can be taken on this question unless it is pursued on a carefully planned administrative policy, adequately advised and controlled from its medical aspects. Such policy can only be carried out by a medical department of the State. For the State tuberculosis as it affects human health must cease to be something totally different from tuberculosis as it affects cattle, and in this, as in other cases, matters vitally affecting the health of the kingdom should not be made a matter for any public department to slur over when it finds itself confronted with the question.

DR. GLOVER'S address at the North London Medico-Chirurgical Society, which we published in THE LANCET of April 20th, presents many points of interest. Most of his hearers would appreciate his judgment in leaving to men of special training the discussion of such subjects as the methods of bacteriology, and in choosing for his theme the work and prospects of medical practice. As a general practitioner he could not but enter somewhat deeply into questions affecting the relation of consultants to members of his own section of the profession. Needless to say, he does not forget what is due to either party. The opinion

expressed by Sir WILLIAM LAWRENCE that pure physicians would soon become obsolete in London is not shared by Dr. GLOVER. As he truly observes, while the medical wants of mankind remain the same as now there will be the same demand for medical service in its different forms and grades. There is, nevertheless, a certain truth and force in the saying of the eminent surgeon already referred to, and Dr. GLOVER shows how the extension of scientific medical teaching and its universal similarity tends inevitably to level the distinctive barriers once existing among medical men. There are some who would reduce the outflow of knowledge intended to meet the requirements of young men about to engage in general practice to a current of considerably less volume than the liberal provision to be placed at the disposal of a coming consultant. We are not of their number, nor, we observe, is Dr. GLOVER. On the contrary, he hails the advent of a period in education when any and every student is understood to acquaint himself with the elements of all the specialisms. A knowledge like this, at once general and particular, must of necessity greatly strengthen and extend the utility of its possessor. It represents so much clear gain to general practice and through this channel to the public, especially to that larger section of it whose means are limited. It must also in a degree, by engendering a habit of self-reliance, render the modern practitioner to some extent independent of professional allies. This is even more true in its application to the medical than to the surgical department of practice, inasmuch as diseases which are usually included within the province of the physician are more frequently met with than are at all events any but the minor occasions for surgical interference. After making every allowance, however, for the natural and right exercise of this result of better instruction there will remain a large margin of doubt and of difficulty in connexion with the duties of the profession where the experience of consulting advisers will find its opportunities of service. The fact that it is aided at such times by the increased intelligence of both the consulting parties cannot but greatly enhance its practical value to the sick. There is an irregular variety of specialism, if we may so describe it, with which it is imperative for the general practitioner to be well acquainted—the knowledge of common and trivial diseases. Dr. GLOVER has done well to call attention to this subject. A revival of the system of pupilage, in his opinion, constitutes one of the best methods of ensuring an acquaintance on the part of young medical men with this wide field of professional responsibility.

The relation of the public as a whole and of the State to the medical profession was discussed at some length by Dr. GLOVER. It is characterised, he observes, by a close and growing intimacy. There is here indeed, as he says, no tendency to medical disestablishment, but rather the reverse. Unfortunately for the medical side of this partnership no feasible scheme of endowment or remuneration for services rendered appears as yet to have been imagined. What movements of justice, gratitude, or remorse may have stirred the corporate mind of the central government it would be rash to suggest. On one point our own view has long been clear—namely, the advantage to the State itself of the adequate representation of the medical profession in both Houses of the Legislature. We have seen that there constantly arises in the conduct of ordinary medical practice the necessity for an interchange of views between those who are concerned with the treatment of disease. Where the State intervenes, as it oftentimes must in the interest of public health, a similar necessity arises. It becomes *de facto* the custodian of public security in relation to disease. Its attitude in this case if it be deprived of professional medical advisers would be in the highest degree irrational. If, then, such advisers are so essential a part of its administrative machinery, what, we would ask, is more natural or more needful to the commonweal than that the position of these medical advisers should be fully recognised and their aid in counsel rendered secure, constant, and inalienable by such acknowledgment?

Dr. GLOVER, during the course of a professional career which began forty years ago, has seen many changes, both in our conceptions of morbid phenomena and in our modes of treatment. It would be superfluous to describe these in detail. They now form part of the solid fabric of medical science, the articles of a creed which is no merely empirical dogma. We pass on to read the lesson which with him forms the appropriate conclusion of much excellent matter—namely, that the contact of minds in social intercourse and in our common work and duty of clinical observation keeps our knowledge fresh. It is the general practitioner's misfortune that the necessities of his ordinary duties allow so little leisure for the study of problems in the treatment of disease. We are certain, however, that in proportion to his interest in this field of research, if it be duly translated into action, will be his success as a practitioner. The importance of maintaining a right relation towards all professional brethren requires no comment. Both ends are most happily served by a connexion with medical societies. Their value has long been recognised by members of the profession, though not always sufficiently, perhaps, by general practitioners. We would, therefore, the more strongly recommend such associations to these latter, who should not only belong to them, but should take active part by furnishing clinical cases, notes, or other material for discussion at the periodical meetings.

IN another part of our present issue we publish an address by Dr. CHAMPNEYS, which discusses at length the matters in dispute between the Obstetrical Society and the General Medical Council. Dr. CHAMPNEYS speaks as the President of the Society, and therefore with authority. It will be well to try to make clear the views which he expounds and to see how far they accord with those of the General Medical Council. This is the more necessary as the General Medical Council will meet towards the end of May, and the adjustment of any differences will be a portion of the business of the Council. In a few words, Dr. CHAMPNEYS may be said to rely on the following propositions for supporting his defence of the action of the Society in supplying those women who pass its examination with "diplomas" testifying to their "skill" in natural labour. His points are as follows:—

Midwives exist and have existed from the beginning. The question is not whether midwives shall exist, but whether they shall be as bad or as good as possible. Dr. CHAMPNEYS

maintains that the difference means an immense difference in the well-doing of lying-in women and their children. The action of the Society was the result of an investigation into the causes of great infantile mortality, especially of newborn infants, suggested by Dr. FARR. This investigation showed that from 30 to 90 per cent. of the poor in villages were attended by midwives; and secondly, that the midwives were not instructed. The action of the Society is perfectly disinterested, as is shown by its constant efforts to hand over the work of examination and certification to a body authorised by law for the purpose. The examination and registration of midwives have been carried out under legal sanction in nearly all foreign countries and have been aimed at in some form in our own country since 1616, when PETER CHAMBERLEN begged the same of JAMES I. The Medical Council and the medical press have advocated such a policy. Such examination will best keep midwives in their proper place and check all irregular practices on their part. Dr. CHAMPNEYS denies that the interests of the profession are affected by the creation of a class to attend the poor for a few shillings. The form of words and the diploma have not been adopted without the advice of the solicitor of the Society.

Our readers would do well to read for themselves the condensed report of the address itself, and of the correspondence which has passed on the subject between the Council—or, rather, its Executive Committee—on the one hand and the Society on the other. The duty of the Council is very simple. It is an executive body, created for administering Acts of Parliament, the chief object of which is to supply the public with duly qualified practitioners, and "to enable persons requiring medical aid to distinguish qualified from unqualified practitioners." Here is a very literal and a very responsible duty from which the General Medical Council cannot escape even if it would. It cannot be indifferent to any action on the part of registered members of the profession—over whom alone it has any jurisdiction—who do anything calculated to confuse the distinction between qualified and unqualified practitioners. It is inconceivable that the Obstetrical Society or its distinguished leaders should intentionally or knowingly do anything of this sort. To their own minds and to the minds of the General Medical Council, or to the mind of a lawyer, it is obvious that the document given to a midwife who has passed the Society's examination has no legal character, and that the woman who has it has no legal advantages over the woman who is without it. But it is undoubted that in giving an imposing-looking document, calling it a "diploma," and guaranteeing the quality of "skill" in the possessor of it they convey to many of those whose interest it is to know the difference between "qualified and unqualified practitioners" an impression that she is a qualified person. Such persons are of the poor and uneducated classes—the classes that use midwives. It is unmistakable that on them such an impression is made. Not only so, it is within our knowledge that it is made on some of the women themselves who receive the document, and they draw a distinction between the certificate which they get from a lying-in hospital and the "diploma" they receive from the Obstetrical Society. We have no doubt that those who framed the diploma of the Obstetrical Society did not anticipate that the words and character and name of their paper could produce such an impression; but now that the point is raised and pressed it would be strange if they did not cheerfully and earnestly meet the wishes of the Council by altering the wording of the document. The correspondence they have published shows their disposition to do so, and we shall be disappointed if before the General Medical Council meets the difference is not adjusted. The Council cannot be charged with indifference on this subject. It has felt its own responsibility and has expressed very definite opinions. But that is no reason why it should not insist on mere amateur certificates being clearly distinguished from documents conferring legal privileges and advantages. The members of the Obstetrical Society will admit that the great improvements in midwifery date from the time when it was brought into line with the other great branches of medical science—medicine and surgery. Once dissociate it from these and from the great principles of hygiene and therapeutics, and the mortality and misery of lying-in women would be quadrupled. The midwife is not a practitioner. She is a special nurse acting under the direction and supervision of the medical profession. It has been our contention throughout that provision should be made in every parish for the poorest person attended by a midwife in any irregularity of labour to have the immediate benefit of a qualified practitioner. We are glad to see that this is Dr. CHAMPNEYS' own view, for he says (the italics are ours): "*A system by which midwives in a district should be placed under the direction of a leading local practitioner would be beneficial to the poor and to midwives.* We should then cease to hear complaints of midwives acting as medical women." We look forward hopefully to the settlement of this dispute without hardship to lying-in women and without any concession of the principle that in the long run the poorest lying-in woman is to have the benefit of a fully qualified medical practitioner.

Annotations.

"Ne quid nimis."

HOSPITAL PATIENTS AND IMMORALITY.

AN extraordinary statement was published in many of our contemporaries on Sunday last that "the number of patients attending the London hospitals would be reduced quite 60 per cent. if the people developed the power of self-restraint and self-control." This statement is said to have been made at a meeting of the Young Men's Christian Association on the preceding evening by Mr. Albert Carless, M.B., M.S., assistant surgeon to King's College Hospital. He is further stated "to have referred to a continual increase of immorality, and claimed that the result was being felt in a very noticeable manner in all London hospitals." Such a statement by a responsible officer in one of our great metroplitan hospitals, unless made on accurate statistics, is much to be deplored, as it must tend to check the contributions of the charitable and to lead to many anxious inquiries by the subscribers and donors to our hospitals. Will Mr. Carless explain how he arrives at this percentage among the patients treated at his own hospital as well as at the other great metropolitan hospitals? Mr. Carless, in seeing out-patients at a hospital where no fees are charged, will, of course, prescribe for a large proportion of venereal diseases; but has he not forgotten the large number of non-surgical out-patients, the casualties, the special affections, and the in-patients, which are daily attended in his and

the other great general hospitals? There are no statistics bearing on these points in the recent issue of the reports of King's College Hospital or in those of any other hospital, and we fail to find any justification for such a sweeping assertion. The recommendations of Mr. Carless to the young men of London are well advised, but such unguarded statements by an important medical officer at a leading hospital will do great injury to such institutions, and should not have been made unless there is statistical evidence forthcoming to prove their accuracy. Has Mr. Carless this evidence? If he has, would it not have been better, in the interests of hospital management, for him to have submitted it to the committee of his hospital with some practical suggestions, rather than have given publicity to such opinions at a meeting at Exeter Hall, where they could not be gauged, corrected, or verified?

THE PRIVATE HOSPITAL CASE.

THE injunction sought by the Earl of Pembroke to restrain the defendants from using the house which they had purchased in Fitzwilliam-square, Dublin, as a private hospital has been granted. That the matter was important and the arguments intricate may be deduced from the strength of the Bar employed, which included no less than eleven counsel of high position, as well as from the time occupied by the case. The house in question was leased by the late Earl of Pembroke to a Mr. Warren, from whom the defendants held it as sub-lessees. The original lease contained a covenant which enumerated several trades or businesses which should not be carried on in the house, and concluded with the words "or any other offensive or noisy trade, business, or profession whatsoever." The whole case turned on the interpretation of these "general words," and the question whether a hospital came within them. It has now been decided in the affirmative, and this square, the houses in which are all similarly circumstanced as regards lease, is well-nigh secure against intrusion on the part of hospitals. It is, however, possible that the defendants may take the opinion of the Court of Appeal on the matter, and the Vice-Chancellor in making the order for the injunction decreed that it was not to come into operation until June 1st, in order that an opportunity of doing so should be afforded.

OVERCROWDING AND UNDERSTAFFING AT ISLINGTON INFIRMARY.

SOME of the Islington guardians are, it appears, by no means pleased at being reminded of the overcrowded and unsatisfactory condition of one of the chief institutions under their care, and they do not accept in the spirit in which it is offered the counsel of the Local Government Board. From a recent report of one of the Board's inspectors it would seem that there are, or were, in the infirmary no less than 168 patients over the certified number, while in the workhouse, which is itself overcrowded, are 160 sick inmates. In addition to this, we are told that the medical staff is inadequate, the nursing staff too small, and the accommodation meagre. This is certainly a somewhat appalling category of the omissions, if not commissions, of the guardians past and present; and we are glad to see that Sir Walter Foster spoke in no uncertain terms to a deputation of the guardians which recently waited upon him as to the course they should pursue, even though it necessitated a very material expenditure. The guardians, it is said, recognise the necessity of further accommodation, and they have at the present time two schemes before them, one for erecting a new infirmary at Bowes Park at an expenditure approaching £200,000, the other for enlarging the present accommodation at St. John's-road at a cost of about £50,000. It was in connexion with this latter scheme that the deputation above referred to waited upon Sir Walter Foster, and commenting upon his observations at that interview one of the guardians is reported to have said that his "language towards the deputation was disgraceful," and that "he had told them not to consider economy, but to squander thousands of pounds to maintain officialism." This guardian's remarks most certainly have afforded some amusement to his colleagues. What connexion there is between providing accommodation for the sick and infirm of Islington in keeping with the spirit of the times and "officialism" we fail to see; nor is it clear why expenditure so incurred should be regarded as "squandering." We imagine, however, that the guardians as a whole do not share the opinion of their colleague, but that they will recognise the necessity of facing this important question and of dealing with it in a broad and comprehensive manner, and not in such a way as to require frequent alterations, tinkerings, and deadlocks. A new infirmary will, we are fully aware, occupy considerable time in building; but in the meantime we trust that the guardians will not postpone the necessary additions to their staff or wait until some serious accident brings scandal upon the institution.

EXPERIMENTS ON NORMAL SLEEP.

AMONGST the numerous papers that were read, or were taken as read, at the International Congress at Rome last year, and which now appear in the first volume of the Reports (or "Atti") just issued to members, is one by Professor I. Tarchanoff of St. Petersburg, who has made some experiments on sleep in puppies varying in age from three weeks to three months. At this age the animals have a strong disposition to sleep—sleeping even when the brain is exposed for experiments on the motor area, or when the carotid is exposed to enable the blood-pressure to be taken, or when they are exposed to cold and fasting; under any of these conditions the act of stroking the head and back for a few minutes will ensure the supervention of sleep; adult dogs, on the contrary, will not thus sleep unless some narcotic has been administered. Position of the body exerts a distinct influence. Thus puppies lightly strapped to a plank were placed some in a horizontal and others in a vertical position, and of the latter some were held with the head downwards and others with the tail down. It was found that stroking and caressing only failed to induce sleep when the head was downwards. In accordance with this was the fact that the excitability of the cortex of the cerebral hemispheres, and particularly of the psycho-motor centres, notably diminishes during normal sleep, so that a test electrical current which when the animal was awake was quite sufficient to excite movements, after it had been put to sleep by stroking had to be strengthened by several—sometimes as much as ten—milliampères to produce the same effect. Experiments made under the same conditions, when the carotids were exposed and connected with a kymograph, demonstrated that the arterial pressure fell during sleep from twenty to fifty millimetres, and that when the animal woke it returned to its former height. These facts are quite in accordance with the statements and observations of Mr. Durham that the brain is anæmic during sleep. Further experiments were made by Prof. Tarchanoff on animals, in which the spinal cord was divided between the dorsal and lumbar regions, from the immediate effects of which injury the animals had recovered. Prof. Tarchanoff set himself to ascertain what the effect of the section was on the reflex acts of the posterior paralysed limbs, as compared with the corresponding acts of the anterior unparalysed limbs. The stimulus applied was the induced current of a Dubois-Reymond's induction apparatus applied by means of needles embedded in the skin, and the results obtained were that whilst the duration of the reflex

acts in the posterior limbs, innervated by the lumbar portion of the spinal cord, remained unchanged during sleep, that of the anterior extremities innervated by the spinal cord and brain underwent a notable depression during sleep, so that on some occasions the current, previously effective, required to be considerably strengthened before any reaction occurred. Hence Prof. Tarchanoff, using the same phraseology as that long ago employed by Marshall Hall, observes that "the spinal cord never sleeps." He thinks, further, that the brain is not during sleep inactive in all its parts, but is, on the contrary, a source of a depressor action propagating itself to all parts of the cord which are in perfect continuity with the brain.

INCREASED REMUNERATION OF DIVISIONAL SURGEONS OF THE METROPOLITAN POLICE.

WE are glad to be able to inform our readers that the Secretary of State for the Home Department has agreed to grant, on the recommendation of the Commissioner of Police, Sir E. Bradford, an increase in the rate of pay hitherto allowed to the divisional surgeons for their attendance on the members of the Metropolitan Police Force. This will in some instances amount to an important item at the end of the year.

COUNTRY HOLIDAYS FOR POOR CHILDREN.

A VERY beneficent work is being carried on by the Children's Fresh-Air Mission, which provides holidays in the country for juveniles from the poor districts of Holborn, Clerkenwell, and St. Luke's. Since 1882 there have been 26,000 little ones favoured in this way, the number last year being 3014. The localities resorted to are very numerous, Minster in Kent last year heading the list with 389 such visitors, and Stokenchurch in Oxfordshire coming next with 260. A fortnight is the usual duration of this happy change from the unwholesome courts and alleys of London to the green fields and lanes of the country, from which the youngsters return to their parents in improved health and spirits, and with an enlargement of their ideas on the subject of natural scenes and objects. The offices of the Mission are appropriately fixed at St. Peter's Schools, Onslow-street, Clerkenwell-road.

THE NEW STREET DANGER.

THE recent reports of Major Cardew on the circumstances connected with the comparatively new street danger arising from the firing of gas by electricity are by no means reassuring or calculated to allay public anxiety. We have absolutely no pledge that the conditions which led to the explosions and disruptions of the pavements in certain of our highways might not obtain elsewhere at any moment. In the last return, for instance, which deals with the Southwark Bridge explosions, Major Cardew finds it is difficult to account for the firing of the gas which undoubtedly was escaping from the gas mains, but he seems confident that it was not by means of the electric lighting mains, as there were none in the vicinity of the explosions. Other causes are consequently sought after, and a lighted match thrown carelessly away or a spark struck by a horse-shoe or wheel is suggested. In that case the question arises as to why explosions of this kind did not occur before electric lighting came into existence. The position, it seems to us, is practically this: electricity has brought to light the fact that gas mains are imperfectly laid down, so that in many instances they seriously leak; and in turn coal gas retaliates, so to speak, on its rival by showing that the mains through which it courses are not exempt from the same charge. It is a curious case of a *quid pro quo* between the two. Competition is looked upon as serving best the interests of the public, but in this case we may claim some exception. "It must be admitted," Major Cardew says, "that the main cause of the Southwark explosions was the defect in the gas-pipe, and it again directs attention to the very serious danger to the public arising from the condition of the gas-pipes in many districts and the way in which they are laid and supported, a danger which is continually increasing owing to the spread of the use of wood paving and other impervious surfaces, and which is temporarily intensified by every severe frost. No remissness on the part of the gas companies can, however, relieve the Electric Lighting Company of the duty of thoroughly complying with Regulations 14 and 15 by sufficiently protecting their conduits and street boxes against an accumulation of gas." We repeat, the danger may still be lurking beneath our streets, and we earnestly appeal to the Board of Trade not to lose a single moment in compelling both gas and electric companies to take all the precautionary steps it is possible to take and thereby to remove a risk of a very serious kind from our crowded highways.

THE EFFECTS OF ABLATION OF THE STOMACH IN THE CAT.

IN the part just published (April, 1895) of the *Archives de Physiologie*, MM. J. Carvallo and V. Pachon give the results of an experiment upon the cat which they performed as a kind of control experiment to those made by other observers, as by Czerny and Kaiser, Filipi and Monari, in which the animal selected was invariably the dog. In the cat it is possible to practise complete gastrectomy, and in one of the cases recorded, in which the animal died after forty-eight hours, union between the œsophagus and the duodenum was found to be complete when the necropsy was made. In another case, in which the animal weighed two kilogrammes, it was living and healthy three and a half months after the operation, and then weighed two and a quarter kilogrammes. It was fed on milk and on a mixture of milk, yolk of egg, and rice. The digestion of milk alone was not perfect, the fæces being liquid and containing clots of undigested milk. The mixture of milk, yolk of egg, and rice was, on the contrary, perfectly digested, as were also fragments of cooked meat, of cheese, and a *purée* of potatoes. All three classes of aliment—albuminoids, fats, and farinaceous substances—were therefore digested in the agastric cat as perfectly as in the agastric dog. Vomiting only occurred on two occasions.

SCHOLASTIC REFORM IN GERMANY.

WE learn from a French source that an innovation of a somewhat peculiar nature has been adopted by the scholastic authorities in Germany. In future the pupils in all public schools are to be divided into two classes—the intelligent and the stupid. The brighter spirits comprised in the first category are to receive instruction in the higher branches of learning, whereas the dullards—once their mental inferiority has been finally adjudicated upon—will be taught the rudiments only. But, it may be asked, by whom is the line of demarcation to be drawn? Whose shall be the invidious task of separating the sheep from the goats? Now, although it is pretty well known that disagreeable duties of an extraneous character are frequently imposed upon members of the medical profession, still we imagine that the answer to the foregoing inquiry will come as a surprise to the majority of our readers. The differentiation between the youthful Teutons is not to be made by their own pedagogues, as might be supposed, neither is it to depend upon competitive examination. Medical men, general practitioners apparently, are to perform the selection, being credited with an ability to arrive at an authoritative decision after an inspection of each child's cranium and general physical development. Not only will they required to discriminate, by virtue of

their physiological attainments, between budding geniuses and imbeciles, a comparatively simple undertaking—they will also be saddled with the responsibility of determining the fate of that far more numerous class whose mental capacity verges on mediocrity. The diagnosis of disease is by no means an easy feat, but inasmuch as the physician has all the necessary data before him, in one form or another, he may not unreasonably be expected to arrive at a correct conclusion. When, however, he is called upon to prophesy, as it were, regarding such a very problematical affair as the future development of a child's brain, his judgment must to a large extent be based upon conjecture. Dull children not infrequently grow up into brilliant adults, and *vice versâ*. On the whole we are inclined to think that this, the latest of pedagogical innovations, is not likely to turn out a conspicuous success.

ANOTHER EXPLOSION AT WALTHAM ABBEY.

WHATEVER may be the practical advantages of cordite for ammunition purposes, there still comes evidence, unfortunately, of the fearful risk run by those engaged in its manufacture. It is reported that an explosion took place on Monday afternoon last at the cordite works, Waltham, where a full charge of 28 lb. of cordite was being pressed in a hydraulic press, which appears to be the essential part of a new compressing process. Two men and three boys were injured, the injuries of one of the former being very serious. The cause of the explosion does not appear to be known, but we are loth to believe that the strictest precautions are not taken to avoid the least possible chance of accident. The latest accounts, however, state that the explosion was due to the cordite becoming dry, owing to the press being left open during a "shift" of workmen. The results of the slightest negligence in the operations concerned in the preparation of powerful explosives of this class may have so serious a consequence and so far-reaching an effect as to demand the strictest supervision. It will be remembered that since the occurrence of a series of disasters which befel the operatives in the cordite factories at Waltham during the last few years a committee appointed to inquire into the matter recommended certain important changes in the management and organisation of the manufacturing processes. We trust that these recommendations were acted upon without the slightest delay.

CHANGES IN THE BLOOD IN YELLOW FEVER.

A MOST valuable and instructive series of articles on the Natural History (Symptoms and Pathology) of Yellow Fever by Dr. Joseph Jones of New Orleans is at present appearing in the *Journal of the American Medical Association*. In the issue of March 16th the condition of the blood in this disease is considered. That the blood undergoes profound changes during the period of febrile excitement of yellow fever is manifest even to the casual observer in the impeded capillary circulation, purplish, jaundiced, and dusky hue of the surface, livid blotches, passive hæmorrhages from slight abrasions, blistered surfaces and hæmorrhages from the ears, eyes, mouth, gums, and gastro-intestinal mucous membranes, which in some cases are characteristic of the succeeding period of calm or exhaustion. The changes of the blood appear to be continuous from the time of the introduction of the poison to the fatal termination. According to Dr. Jones the alterations of the blood in yellow fever consist chiefly in: 1. Such an alteration of the chemical and physical properties of the fibrin and albumen as leads to the transudation of the latter through the excreting structures of the kidney. 2. Various degrees of alteration and diminution of the fibrous element. In some cases there is an almost entire disappearance of this element. This disappearance appears to be due to the direct action of the febrile poison and not so much to the action of ammonia. From this alteration in the amount and character of the fibrinous element it results that the blood coagulates imperfectly and the clot is voluminous and soft. 3. While the red blood-corpuscles are very slightly diminished in yellow fever they present under the microscope certain peculiar appearances, which appear to be referable to the action of extraneous matters in the blood. 4. Increase of the extractive matters of the blood. 5. Increase of the fatty matters. 6. Accumulation of bile in the blood in consequence of the profound lesions of the liver induced by the febrile poison, and in consequence of the failure of the excretory function of the kidneys. Many of the changes of the blood, as well as certain cerebral symptoms, may be dependent upon the presence and action of the biliary constituents. The serum presents a golden colour, this being due to the presence of bile. 7. Accumulation of the urinary constituents, and especially of the urea and phosphoric acid, sulphuric acid, chloride of sodium, and carbonate of ammonia, in the blood consequent upon the profound lesions induced by the febrile poisons and its products upon the kidneys. 8. Rapid dissolution of the coloured corpuscles after the blood is abstracted from the body either during life or after death. 9. Rapid putrefaction of the blood of those suffering from yellow fever after its abstraction from the living body or from the large vessels after death.

MILK FOR INFANTS.

MUCH as cows' and women's milks may vary in composition among themselves, as may also that of the same individual at different times, the essential distinction between the two milks lies in the larger percentage of casein in that of the cow and in the tougher consistence of the coagulum produced by the gastric secretion. The latter defect is to some extent overcome by malting, and the former may be adjusted to the infant's digestive powers by diluting the milk with water or by dividing the milk into two portions, coagulating the casein in one with rennet, removing the curd, and mixing them again. The former is open to the grave objection that dilution reduces the fat and the sugar, neither of which were in excessive amount, equally with the casein, and, though milk sugar and cream may be added, cream itself contains very uncertain proportions of fat and cannot again be perfectly incorporated with the milk, the fat globules having to some extent coalesced. In the latter process the proportions of fat and sugar are undisturbed; but it is tedious, and the tendency of the milk to "turn" is increased. Gaertner has recently taken advantage of the action of the centrifugal separator to retain in a diluted milk the full percentage of the fat. Fifty litres of fresh milk and the same of water are poured into the separator, which is made to revolve at such a rate that the two outgoing streams shall be equal. The separation of the fat is thus incomplete, and a large proportion of the watery solution passes out with it, the percentages of casein and of fat being in the original milk, say, 3·6 and 3·5, in the diluted 1·8 and 1·75, and in the cream and separated, or rather in the rich and poor milks, respectively 1·8 and 3·3 and 1·8 and 0·2, those in good nursing mother's milk being, according to Pfeiffer of Wiesbaden, 1·7 and 3·1. If, then, milk sugar be added in the proportion of 3·5 grammes to the litre the composition becomes identical with the very richest human milk. An incidental advantage accruing from the centrifugal rotation is that the rich milk is completely freed from the suspended particles of dung, dust, &c., which in virtue of their greater specific gravity gather round the sides of the drum, forming a scum, which is fatal to young pigs. These particles are the chief vehicles of the microbes which set up putrefactive

changes in a fluid which, though unstable, is absolutely germ-free and aseptic as it issues from the breast or udder, and to this difference many of the evils of artificial feeding are doubtless due. Gaertner's, if not actually sterile, is more easily sterilised than other milk.

THE HEALTH OF THE RT. HON. T. H. HUXLEY.

WE are glad to learn that Professor Huxley not only is holding his own, but that during the last two days there has been a steady, if slight, improvement. His condition is, of course, serious, as he is still suffering from the effects of influenza and bronchitis; but the strength is well maintained, the digestion better, and the appetite returning.

MEDICAL SOCIETIES AND HOMŒOPATHS.

THE West London Medico-Chirurgical Society has adopted the by-law quoted in our columns on the 13th inst. It has thus made it impossible for anyone practising so-called homœopathy to be nominated as a candidate for the membership of the society, and has also provided for the expulsion of any member who joins the ranks of homœopathy. The society is to be congratulated on having taken a step which propriety and harmony alike demand.

LONDON POST-GRADUATE COURSE.

THE summer term demonstrations and lectures will be given at Great Ormond-street, Queen-square, Moorfields, Blackfriars, Bethlem, London Throat, King's College Hospitals, and Cleveland-street Sick Asylum. The instruction will include Diseases of Children, of the Nervous System, of the Eye, of the Skin, of the Mind, of the Throat, Nose, and Larynx, &c., and Bacteriology. The fees are £1 1s. for eight lectures, and £2 2s. for sixteen. The term will commence on Monday, May 6th, and will end on Monday, July 1st. A prospectus can be obtained from the secretary, Dr. Fletcher Little, 32, Harley-street, London, W.

DIPHTHERIA IN LONDON.

IN the four weeks ended with last Saturday diphtheria has manifested some wide differences, both as regards amount and fatality, within the metropolis. Thus its weekly notifications have ranged between 130 and 170 and fatal attacks between 23 and 31, though the greatest deviation from the corrected average of deaths for any one of those weeks has been 5, and the mean of the averages and actual deaths for the whole period differs only by a unit—namely, average 27 and deaths 28. The total of deaths in the four-weekly period was 111, or just under half that of the similar period of 1894, in the several weeks of which the corrected average was exceeded by as many as 23, 30, 31, and 37 respectively. In the matter of notifications the current year shows for the period being treated a weekly average of less than 150, whereas that for 1894 yields upwards of 200; and in the matter of death-rate per cent. of cases 1895 gives just under 20, against 27 last year, the highest weekly mortality being in the present year 24, and in 1895 as much as 33 per cent. of notified cases. Comparison of the period in question with the four weeks of the present year immediately preceding does not leave a very favourable impression as regards attacks, as the 488 notified cases of the earlier period have been replaced by a total not far short of 20 per cent. in excess, and this, though the lesser total, is made up of sanitary district numbers, which were in seven instances upwards of 20, and ran as high as 46 in Greenwich and 57 in Camberwell. As showing the wide diffusion of the disease we may mention that in this same earlier period not one of the forty-three sanitary areas escaped invasion, though it is true that four had only a single notification each in the period. Thus, we have at present an epidemic which is of smaller proportions than in 1894, though not showing signs of decrease as compared with earlier weeks of the current year, either in amount of disease or of death. Last week the admissions to hospital were 35, and the patients remaining under treatment 441, against 435 three weeks before. There were 15 deaths in Greater London, of which as many as 9 occurred in the West Ham district.

SIR JOHN BUCKNILL.

OUR contemporary the *Globe*, in its issue of the 19th inst., has a short paragraph respecting the visit of the Commander-in-Chief to Exeter on May 24th for the purpose of unveiling a statue erected by public subscription to commemorate the services rendered by Sir John Bucknill in connexion with the foundation of the Volunteer force. In congratulating Sir John Bucknill upon the fact that his memory is thus to be perpetuated, we cannot at the same time congratulate our contemporary upon its accuracy in heading the paragraph, "The late Sir John Bucknill." As far as our information goes he is "yet alive," and we trust that he may long have the opportunity of seeing with his own eyes the mark of honour erected to him in Exeter.

DEATHS UNDER ANÆSTHETICS.

A CHILD four years of age, weakly, rickety, and with unhealthy flabby tissues, recently became the subject of tonsillotomy at the Dudley Dispensary. The child was placed in an almost upright position on the porter's knee before an open window. Chloroform was then given from a folded towel; care was taken that free dilution with air was permitted, and two drachms in all were used. The child took the anæsthetic well, although it appears that the tonsils were very large and interfered with respiration. In from thirty seconds to two minutes breathing stopped and cyanosis came on. The child was placed on the floor and tracheotomy performed, but upon artificial respiration being practised normal breathing was resumed for a few seconds, and the child opened and closed his eyes. The heart then failed and death took place, micturition and defecation occurring. The necropsy showed enormous tonsils, glands which encircled and constricted the trachea at its bifurcation and the bronchi; slight catarrh and possibly slight narrowing of the windpipe existed. These notes are kindly supplied by Dr. E. Hawkins. The chloroform was analysed and found free from impurities. The difficulties of such cases are notorious, but we cannot help thinking it was ill-advised to increase the risks, as was done in this case, by placing the child in an almost upright posture. There is no doubt that if such children, flabby and weakly as they are, with an impaired respiratory passage and lowered vitality, are given an anæsthetic for tonsillotomy they should be carefully prepared, should have good, nourishing but easily assimilable liquid food two or even one hour before the operation, and if chloroform is given they should be placed in the recumbent position. A further death more or less connected with the anæsthetic has occurred in London. Mr. Atwood Thorne has kindly communicated the following particulars. The patient, a small, stout woman, who was in labour, was attended from St. Mary's Hospital. She had had seventeen previous confinements. When seen she was in a somewhat exhausted state, with a pulse-rate of 140; she had been in labour twenty-four hours. Mr. Thorne gave chloroform, and attempted to rotate the head digitally, as it was in the fourth vertex position; failing this the child was successfully delivered with forceps. Chloroform, which had been given for twenty minutes, was then stopped, three or four drachms having been used. Fifteen minutes later, when the woman was apparently coming out of

the anæsthetic quite naturally, she suddenly took a few deep breaths, became cyanosed, and respiration ceased. The tongue was protruding out of the mouth. The heart was still beating, and continued to do so for about ten minutes, but in spite of attempts made to restore the respiration it never recommenced. The necropsy, besides showing the usual "fatty degeneration of the heart," revealed no fact helping to explain why this woman died. The period at which the dyspnœa occurred and the cyanosis resemble cases of pulmonary embolism; but if this may be excluded it is possible that there was medullary hæmorrhage (which is known to have occurred under anæsthetics) involving the respiratory centre. Unfortunately the necropsy was not made for ninety hours, so that much of the value of the investigation is, from the point of view of science, wholly lost.

THE PREVENTION OF OVERLAYING.

IT is a simple matter to expose and condemn the practice which is mainly accountable for the overlaying of infant children. Neither is there any difficulty in prescribing the only possible preventive of this so-called accident. A box, a basket—in short, any one of twenty simple contrivances—might form an extemporised crib in cases where a cradle or cot-bed is not obtainable. Consequently, there is no excuse for the too often fatal custom which allows an infant to sleep with its parents. Unfortunately, it is only too easy to let ill alone and to do nothing by way of precaution. The careless, the indolent, and the drunken (it is notorious that the great majority of cases of overlaying have occurred on Saturday night[1]) continue to neglect even such an elementary safeguard as that we have mentioned. The obvious result, as we learn from a statement recently made by Mr. C. L. Drew, is that from 600 to 800 inquests are annually held in London alone upon overlain children. There is a natural reluctance to invoke the aid of legislation in restraint of every fault in domestic management, but it must be evident that we have here sufficient justification for such assistance. The case is, indeed, one which very strongly suggests the necessity of increased popular instruction in this subject by means of the Press and every other available channel. We are clearly of opinion, however, that some deterrent is also called for, such, for example, as the imposition of a reasonably heavy fine in all cases where the precaution of using a separate bed of some sort for children has been overlooked.

THE PATHOLOGY OF THOMSEN'S DISEASE.

IT is barely twenty years since there was described in the *Archiv für Psychiatrie* an affection characterised by singular muscular phenomena in several members of one family. The affection, since known by the name of the physician who then first described it, has been studied by many observers, amongst whom may be especially mentioned Professor Erb, who termed the condition "myotonia congenita." The main features of the affection, apart from its hereditary character, consist in an increased volume of muscular masses, suggestive of a kinship to pseudo-hypertrophic paralysis, accompanied by notable impairment of power, and the assumption of a state of tonic spasm on the contraction of the affected muscles. There is, further, an increased excitability to faradaism and galvanism, with a tendency to the reaction of degeneration. Moreover, Professor Erb found that ensuing on the "closure contraction" of galvanism there occurred a series of slow and regular undulatory contractions, which gradually spread from the negative to the positive pole, a phenomenon which he termed the "myotonic reaction." Hitherto no opportunity has occurred for full observation of the morbid anatomy of Thomsen's disease, but a paper in the *Revue de Médecine* for March by Dr. Dejérine and Dr. Sottas supplies this deficiency. It is founded upon the case of a man who first came under observation at the age of thirty-two, having since infancy suffered from this affection. It was characterised in him by marked hypertrophy of the muscles of the lower limbs and trunk, and less obvious change in those of the upper limbs. All the muscles of the body were rigid when in contraction, and were but slowly relaxed; the myotonic reaction was present. The patient succumbed at the age of thirty-seven from acute nephritis. No change was found in the nervous system, central or peripheral, but an examination of the muscular system, specimens being taken from all parts, afforded an insight into the nature and progress of the lesions therein. These lesions consisted, in the first place, in a nuclear overgrowth, following which the muscular substance proper apparently becomes swollen, the fibrillæ becoming fused together, whilst the transverse striation is retained or is even more pronounced than normal. Measurement showed a notable increase in the diameter of the affected fibres. There is, further, a like increase in the interfibrillar protoplasm, rendering the "Cohnheim's fields" more distinct. In more advanced stages the muscular substance disintegrates, and vacuolar spaces are formed in and between the fibres. It is remarkable that the connective tissue does not undergo any hyperplasia, nor is there any excess of adipose tissue as in pseudo-hypertrophic paralysis. It may be remarked that the changes described in this paper agree in the main with those found by others who have examined fragments of the hypertrophied muscles excised during life; but the record of Dr. Dejérine and Dr. Sottas is far more complete, since they had the opportunity of tracing the changes from early to advanced stages. It is pointed out that the hypertrophy commences and is most marked in those muscles which are the most exercised, and it is concluded that in Thomsen's disease we have to do with a "hypertrophy of functional origin." The affection thus ranks with the group of dystrophies of the muscular system known as primary myopathies.

THE RELIEF OF CHITRAL.

NOTHING more exciting has taken place for some time than the race between the forces to win the honour and glory of relieving Surgeon-Major Robertson and his beleaguered companions in Chitral. The display of pluck and energy, and the exhibition of splendid audacity, alternating with periods of suspense and doubt during the absence of news, have imparted a dramatic force to the military incidents as they have unfolded themselves from day to day. The fact, too, that the exhibition of daring and endurance was most conspicuous on the part of the smaller and weaker force touched the public sentiment and caused the brilliant and remarkable march of Kelly's force to be followed with great sympathetic interest. The fortitude and manly qualities brought out in this expedition have made people feel that so long as these endure the interests of this country are safe, and that, whatever the emergency, there would always be men ready to do their "level best." The lads that go out as officers to India and elsewhere leave England with the corners of the British flag grasped unconsciously in their hands and spread it over the four quarters of the globe. And not only have the pluck and endurance of the officers and men of the British army been fully exemplified, but the splendid qualities of the native army of India have been emphasised on this occasion. Defying climate and disease, labouring and fighting under a tropical sun or amidst icebergs with the same indomitable perseverance, scornful of difficulty and defeat, the forces have pursued their way. The marches that have been made, the mountain passes that have been crossed—the height of the Shandur Pass is

[1] Vide THE LANCET, Aug. 20th, 1892.

12,000 ft. above the sea level—and the physical obstacles that have been surmounted by the different columns taking part in this expedition will cause the relief of Chitral to occupy a memorable place in military history. Spite of floundering in snow, crossing ice-fields, and encountering storms, and in face of extreme difficulties in the transport of the necessary war material and food, the men, one and all, native and European, have apparently gone ahead, fighting with nature and man, with undaunted spirits and excellent health. The medical history of the expedition, when it comes to be written, will, if less exciting, be as interesting as its military history.

MR. PASSMORE EDWARDS AS A HOSPITAL PATRON.

MR. PASSMORE EDWARDS must be a many-sided man. He is the reputed proprietor of papers which traduce medical research and whose columns are open to every faddist who will decry the methods by which, and the men by whom, medical science is established. But he is always ready to open a hospital, or even take part in the proceedings of a medical school, and to put down a substantial sum for providing poor people with the very medical service that is decried in his papers. It is not for us, perhaps, to do more than look with awe, if not with admiration, on a gentleman whose sense of duty enables him to play such diverse parts. The last act of this good man's life was to open a new wing of West Ham Hospital, the cost of which he is defraying. By this act of beneficence Mr. Passmore Edwards supplies twenty-four new beds, in which patients will receive all the benefits of medicine that accrue from the studies and the researches so severely and suspiciously regarded in Mr. Passmore Edwards' papers. We can only take note of the fact, and conclude that deeds are more than words, that Mr. Edwards, after all, has a high opinion of medicine and of those who practise it, and that when he allows his papers to be the medium of contrary opinions he is so conscious of their absurdity as to believe that they will not be acted on.

SOLAR OBSERVATIONS WITH THE UNPROTECTED EYE.

Dr. GEORGE MACKAY of the Royal Infirmary, Edinburgh, has done good service in pointing out the dangers of observing eclipses and solar phenomena with the naked eye in a pamphlet he has written on this subject and in the *Ophthalmic Review*. He cites the case of Galileo, who is said to have lost his vision in this manner. Sir Isaac Newton was equally imprudent, and permanently damaged his retina by looking at the sun for a moment through a telescope. He, in fact, narrowly escaped complete loss of central vision, for he long suffered from a scotoma, or central darkness, and although he partially recovered from this condition, it was only necessary for him to think of the lesion to cause an image of the sun's disc to rise before him. Dr. Reid, the Professor of Moral Philosophy at Glasgow, was also a sufferer, and when he observed the passage of Venus in May, 1761, took no precaution to diminish the brilliancy of the light, the result being that all the objects he looked at appeared to be deformed. In this case there was probably in the first instance some subretinal effusion and the retina did not perfectly reapply itself to the choroid. Dr. Mackay has met with no less than seventeen cases of persons in whom the vision was impaired as the result of the investigation with the unprotected eye of the eclipses of 1890 and 1891. Still more recently Dr. James Barrett of Melbourne has reported a case in which an eclipse of the sun was watched for a quarter of an hour by a girl aged seventeen; but in this case some precautions were used, as she protected her eyes with coloured glasses, two of which were blue and the other two red and yellow respectively. A haze or central misty spot was noticed in the course of a fortnight, which remained unaltered after the lapse of three months. It is obvious that no inspection of sun spots or other solar phenomena should be made with an ordinary telescope under any circumstances, and that great circumspection should be used in watching the phenomena, even through coloured glasses. Probably all trouble could be averted by looking at the image of the sun as reflected from a fragment of blackened glass.

THE University of Glasgow has just conferred the degree of LL.D. *in absentiâ* on Surgeon-Major Laurence Augustine Waddell, who graduated at Glasgow in 1878 as M.B. and C.M. (with honours), entered the Indian Medical Service, and while stationed in Calcutta wrote several papers on the pharmacology of Indian medicinal products. He also made a collection of Sikhim birds, which he fully described and afterwards presented to Dr. William Hunter's Museum in Glasgow University. He is, moreover, an adventurous traveller, being one of the few who have penetrated into the territory of the Grand Lama of Thibet and studied the religious system of that country. He has recently published a work entitled "The Buddhism of Thibet or Lamaism." Surgeon-Major Waddell was for some time editor of the *Calcutta Medical Journal*.

A CONFERENCE on sanitary progress and reform was opened at Manchester, on the 24th inst., in the presence of a large number of representatives from all parts of the country. The inaugural address was delivered by Dr. Simpson, who referred to the great strides made of late years in matters relating to sanitation in its various branches. The proceedings extend over three days. We hope to print Dr. Simpson's address next week in full.

THE annual conversazione of the Royal Society will be held on Wednesday, May 1st.

THE REPORT OF THE ROYAL COMMISSION ON TUBERCULOSIS.

THE report of the Royal Commission on Tuberculosis was presented to Parliament on the 22nd inst. As appointed on Nov. 14th, 1894, it consisted of Sir George Buchanan (chairman), Professor Browne, Dr. J. F. Payne, and Professor Burdon Sanderson, and the report receives the assent of all its members.[1] This Commission succeeded to the Royal Commission of 1890 on the death of the chairman, Lord Basing, and its report is based upon evidence received and inquiries originally instituted by the original Commission. Mr. Leopold Hudson, F.R.C.S., has throughout acted as secretary. The terms of the reference made to the Commission were: "To inquire and report what is the effect, if any, of food derived from tuberculous animals upon human health, and, if prejudicial, what are the circumstances and conditions with regard to tuberculosis in the animal which produce that effect upon man."

Lines of Enquiry.—It appears that the Commission, after examining a number of distinguished pathologists and physicians and making inquiries by letter among medical officers of health and others, came to the conclusion that they had not sufficiently definite evidence on the matter referred to them. Accordingly, they instituted inquiries—(1) by Professor McFadyean into the means of recognising the tuberculosis in animals during life; (2) by Dr. Sidney Martin, as to the influence upon lower animals of food of tuberculous origin; and (3) by Dr. Sims Woodhead, as to the effects of cooking processes upon food from tuberculous animals; and

[1] A memorandum by Professor Browne concerning the effect of the Commission's investigations upon food salesmen is appended to the report.

it is upon the results of these investigations that the report is chiefly based.

Influence upon animals of food of tuberculous origin; influence upon man.—Briefly dismissing as unsatisfactory any direct evidence of the effect of food of tuberculous origin upon man, the Commission relies upon the experiments conducted for it on lower animals, and these show, then, firstly, that uncooked food (meat or milk) derived from tuberculous animals, whether consumed by rabbits, guinea-pigs, cats, or pigs, produces tuberculosis in a considerable proportion of each; secondly, that tuberculous matter added if only on one occasion to the ordinary food of any of these animals causes a still larger proportion to become tuberculous. The facts and figures about these animals, together with an account of necessary control experiments, are given, and they prove to the Commission that tuberculous matter exists in ordinary food derived from a tuberculous animal, and that when this food is consumed by lower animals it is capable of producing tuberculosis among them. Following this is Section 22 of the report: "We cannot refuse to apply, and we do not hesitate to apply, to the case of the human subject the evidence thus obtained from a variety of animals that differ widely in their habits of feeding—herbivora, carnivora, and omnivora. As regards man, we must believe—and here we find ourselves agreeing with the majority of those who gave evidence before us—that any person who takes tuberculous matter into the body as food incurs some risk of acquiring tuberculous disease." Next, after stating explicitly that tuberculosis is to be regarded as the same disease in man and in food animals, the report considers the nature of human tuberculosis liable to originate in food. It will be observed that the Commission takes the view that no distinction is to be drawn in nature between tuberculous diseases originating in food infection and those originating in other ways. They point, however, to the probability that the greatest effect of food infection is to be found in the tuberculous intestinal lesions of children.

Prevalence of tuberculosis in food animals Recognition of it.—The knowledge which the Commission has been able to obtain of the prevalence of tuberculosis among animals brought for slaughter in the United Kingdom appears to have been but small, seeing that in none of our public abattoirs is systematic inspection made for tuberculosis with anything like the precision employed in many places on the Continent. Accordingly, we find the report quotes from the records of slaughter-houses both in Berlin and Copenhagen, having reason to believe that they present a broad resemblance to the conditions of tuberculosis among animals brought for slaughter in this country; and such statistics as are available for the United Kingdom confirm them in this view. The percentages of animals found to be tuberculous in Copenhagen (1890–93) and Berlin (1892–93) respectively were: oxen and cows, 17·7 and 15·1; swine, 15·3 and 1·5; calves, 0·2 and 0·23; sheep, 0·0003 and 0·003. Attention is drawn to the greater prevalence among cows than oxen, and among both as compared with calves. The rest of the report deals chiefly with food from cattle. Of diagnosis of tuberculosis during life the Commissioners speak very guardedly. The literature of the subject and the results of Professor McFadyean's special inquiry convinces them that extensive tuberculous disease may exist in cattle that appear to all clinical tests to be in perfectly good health. And they are clearly indisposed to believe that a completely trustworthy test of the presence of tuberculosis has yet been proved to exist in the reaction to tuberculin. "Professor McFadyean finds, in his own hands, that this test substance has frequently led to erroneous inferences. He records, as the total outcome of his experiments, that he received wrong indications from tuberculin about the presence or absence of tubercle in cattle in the case of twenty-four animals out of seventy-five; nevertheless, he sums up his report by the statement: 'I have no hesitation in saying that, taking full account of its imperfections, tuberculin is the most valuable means of diagnosis in tuberculosis that we possess.' And we understand that, since the time of Professor McFadyean's experiments, the method of using tuberculin as a test has been much improved, and that it is now regarded as affording more trustworthy indications for diagnosis."

Circumstances determining danger to man from meat and milk of tuberculous origin. (a) Danger from meat.—The circumstances of danger from meat are next discussed in several pages of the report, and the conclusions of the Commission, chiefly based on Dr. Martin's experiments, are set forth in a closely reasoned argument which is difficult to summarise. Tuberculosis of the animal is chiefly a disease of organs which are for the most part removed in the process of dressing. Some organs, however, may be left in the dressed carcase, although "to a practised eye it is hardly possible that tuberculous matter in these organs can escape detection." Apart from such tuberculous masses, the material of tubercle, even in advanced cases, is not often found in the ordinary butcher's joint, certainly very rarely in muscle substance, although small tuberculous lymphatic glands may occasionally be found, for instance, in the intermuscular fat. "Yet there is always a difficulty in making sure of the absence of tuberculous matter in any part of a carcase that shows evidence of tubercle elsewhere." The report now considers the results of Dr. Martin's experiments with the substance of meat prepared in the ordinary way from tuberculous animals, but taken free from any obvious tuberculous mass. In these experiments he tested the infective quality both by inoculation of portions of the meat into test animals and by giving it to other test animals as food. In the meat substance of twenty-one tuberculous cows (cows were found the most convenient animals in these researches) he "could not get visible evidence of tubercle except in two instances, and there it was of very small amount. He records the results of his other tests as follows: 'Of eight cows (mild tuberculosis) the meat of one gave positive results in one animal from inoculation; none by feeding. Of eight cows (moderate tuberculosis) the meat of three gave positive results in four animals from inoculation; none by feeding. Of five cows (generalised tuberculosis) four gave positive results either by inoculation or by feeding,' one only out of the four appearing to answer to both tests.[2] The animals which had yielded affirmative results to his test of minute examination were not among the last five; they were in the group of cows with 'moderate tuberculosis,' and had given no result by feeding test animals with meat from their carcases, though meat from one of the two had, upon inoculation, responded to the test."

These results were thus completely out of accord with the determinations Dr. Martin had made of the presence or absence of demonstrable tubercle in each case. And in an able argument the Commissioners explain the views he took of his results—namely, that the power of infection of meat from these carcases is mainly due, not to tuberculous matter left in the meat *in situ*, but to matter carried from tuberculous organs in the process of dressing by the butchers' knives or cloths and thus smeared freely over the carcase. It is obvious that the danger of such a proceeding must increase *pari passu* with the amount and distribution of the tuberculosis in the animal. While accepting this as the chief danger of the meat, however, the report observes that "To have demonstrated this extrinsic way of rendering dangerous the meat substance of tuberculous animals is to destroy all evidence that might otherwise have been attained respecting the wholesomeness or unwholesomeness of the proper meat substance towards Dr. Martin's test animals." The report continues with this observation: "We note in passing that this method of endangering the meat substance could not have been detected upon carcases from which the organs, together with any 'grapy' deposit, had been removed; and it is pertinent to observe, in connexion with a contamination so effected, that this extrinsic danger to harmless meat (or to meat that was, for all that is shown to the contrary, harmless) might just as well be encountered by meat from another animal (whether pig, sheep, or calf, ox or cow) that was perfectly free from tubercle, but only had happened to be the next animal brought to the same slaughterer." Upon the bearing of the conclusions so arrived at the Commissioners state that they are prepared to believe, with Dr. Martin, that if sufficient discrimination and care were exercised in taking meat from tuberculous cattle a great deal of meat from them might, without danger, be consumed by the community; and they point to the practice of public abattoirs on the Continent as being founded on the same belief.

They proceed to summarise the precautions that Dr. Martin advises: "He would advocate, as a principle, that the operations of slaughter and dressing should be done under skilled supervision, with the object of securing the removal and destruction of every part of a carcase that contained any tubercle whatever, and also the destruction of the whole carcase in cases where the animal was found to have

[2] Section 104, p. 31.

advanced or generalised tuberculosis. He indicates, for the assistance of any meat inspector, various evidences of the disease having reached that more serious stage. For the rest, Dr. Martin sees no objection to the sale of meat-substance from carcases which have shown only localised tuberculosis, and from which every particle of tubercle has been skilfully removed; provided always that, in every subsequent process of preparing the meat for sale, due care be taken to guard the saleable portions from contamination by tuberculous matter." The Commissioners state their opinion that these suggestions are based on well-ascertained pathological facts, and that the supervision recommended would tend in an important measure to the security of the public. Yet they show their appreciation of the difficulties of obtaining this security for all meat, especially for imported meat when the conditions under which the carcase was prepared cannot be ascertained. "It is hardly necessary to point out that little evidence about the more serious degrees of tuberculosis in the animal would be discoverable in carcases from which the organs had been removed, and that this is habitually the case with so-called 'dead meat,' whether English or foreign. Still, there are indications in such a carcase, to the eye of an experienced inspector, of the more dangerous forms of tuberculosis having existed in the animal."

(*b*) *Circumstances determining danger from milk.*—Upon this matter the report is able to be much more definite and to adduce striking evidence (based upon differential experiments made by Dr. Martin) to show that the milk of a tuberculous cow is only infective when it comes from a tuberculous udder. The Commissioners set forth their experiments, which seem conclusive. They point out that the udder affection is not peculiar to the advanced stage of tuberculosis, but that it may occur in slighter cases. They also draw attention to the great virulence of milk from this source, and point to the fact that the mixed milk from all four teats of a cow with tuberculosis of one quarter of the udder only proved to be every whit as infectious as milk from the tuberculous quarter alone. Further, butter, skimmed milk, and buttermilk from a cow with a tuberculous udder are actively infectious In Section 62 the rapidity with which tuberculosis may attack the udder is noted, and an observation of Dr. Woodhead is quoted in which he says that on several occasions he has found tuberculosis of the udder developed during the interval of a fortnightly inspection of cows. The Commission comes, therefore, to the conclusion: "The withdrawal from dairies of every cow that had any disease whatever of her udder would form some approach to security against the serious danger incurred by man from the use of tuberculous milk, but it would not be an adequate security. The presence in a dairy of a tuberculous cow, as Drs. Martin and Woodhead have shown, is a decided source of danger to the public, especially having regard to what we have learnt respecting the rapid development of tuberculosis in the udder, and the degree of danger to milk consumers incurred by the invasion of the udder in tuberculous cows. It follows from the observations here recorded that it is of supreme importance to the consumers of milk that the existence of any tuberculous disease of the udder should be ascertained without delay. Now there is no difficulty whatever about recognising the presence of some abnormal condition in a cow's udder, and the presence of such condition, whatever it be, demands that the judgment of a responsible expert should forthwith be obtained about its nature, unless, indeed, the owner prefers to slaughter the cow without delay. If the expert finds tubercle bacilli in the milk the cow has dangerous tuberculosis of the udder. If he does not find them he may apply the further test of inoculating some susceptible animals with the milk, and thereby learn the nature of the udder disease. By this test he will very rarely be misled. Obviously the cow must be in seclusion, and every particle of her milk must be treated as highly dangerous, during any delay that can be permitted for diagnostic purposes, and until the disease has been proved not to be tuberculosis."

Influence of cooking upon tuberculous meat and milk.—As a result of Dr. Sims Woodhead's experimental researches the Commission reports that while in ordinary cooking the temperature on the surface of the joint is sufficient to destroy the infective quality of tuberculous matter in that situation, yet cooking, no matter by what method, cannot be relied upon to sterilise such matter below the surface. Particular attention is drawn to Dr. Woodhead's remarks upon "rolled" meat, which is specially likely to contain in its interior either tuberculous serous membrane or tuberculous matter originally smeared on the surface in the preparation of the slices into rolls. Agreeing with Dr. Woodhead's observations, the report expresses the belief that no ordinary cooking would destroy infective material in such rolls, and that these, in point of fact, "probably form the maximum of danger to meat consumers." In order to destroy the infectiveness of tuberculous milk the Commission warmly advocates boiling, and evidently regards with suspicion any advice to the public to attempt to sterilise milk by heating it to a temperature short of boiling point.

The following is the recapitulation appended to the report.

RECAPITULATION.

"We have obtained ample evidence that food derived from tuberculous animals can produce tuberculosis in healthy animals. The proportion of animals contracting tuberculosis after experimental use of such food is different in one and another class of animals; both carnivora and herbivora are susceptible, and the proportion is high in pigs. In the absence of direct experiments on human subjects we infer that man also can acquire tuberculosis by feeding upon materials derived from tuberculous food animals. The actual amount of tuberculous disease among certain classes of food animals is so large as to afford to man frequent occasions for contracting tuberculous disease through his food. As to the proportion of tuberculosis acquired by man through his food or through other means we can form no definite opinion, but we think it probable that an appreciable part of the tuberculosis that affects man is obtained through his food. The circumstances and conditions with regard to the tuberculosis in the food animal which lead to the production of tuberculosis in man are, ultimately, the presence of active tuberculous matter in the food taken from the animal and consumed by the man in a raw or insufficiently cooked state. Tuberculous disease is observed most frequently in cattle and in swine. It is found far more frequently in cattle (full grown) than in calves, and with much greater frequency in cows kept in town cow-houses than in cattle bred for the express purpose of slaughter. Tuberculous matter is but seldom found in the meat substance of the carcase; it is principally found in the organs, membranes, and glands. There is reason to believe that tuberculous matter, when present in meat sold to the public, is more commonly due to the contamination of the surface of the meat with material derived from other diseased parts than to disease of the meat itself. The same matter is found in the milk of cows when the udder has become invaded by tuberculous disease, and seldom or never when the udder is not diseased. Tuberculous matter in milk is exceptionally active in its operation upon animals fed either with the milk or with dairy produce derived from it. No doubt the largest part of the tuberculosis which man obtains through his food is by means of milk containing tuberculous matter. The recognition of tuberculous disease during the life of an animal is not wholly unattended with difficulty. Happily, however, it can in most cases be detected with certainty in the udders of milch cows. Provided every part that is the seat of tuberculous matter be avoided and destroyed, and provided care be taken to save from contamination by such matter the actual meat substance of a tuberculous animal, a great deal of meat from animals affected by tuberculosis may be eaten without risk to the consumer. Ordinary processes of cooking applied to meat which has got contaminated on its surface are probably sufficient to destroy the harmful quality. They would not avail to render wholesome any piece of meat that contained tuberculous matter in its deeper parts. In regard to milk we are aware of the preference by English people for drinking cows' milk raw—a practice attended by danger on account of possible contamination by pathogenic organisms. The boiling of milk, even for a moment, would probably be sufficient to remove the very dangerous quality of tuberculous milk. We note that Your Majesty's gracious commands do not extend to inquiry or report on administrative procedures available for reducing the amount of tuberculous material in the food supplied by animals to man, and we have regarded such questions as being beyond our province."

THE SURGICAL CONGRESS IN BERLIN.

(FROM OUR BERLIN CORRESPONDENT)

FIRST SITTING, ON APRIL 17TH.

THIS Congress was opened in the great hall of the Langenbeck House under the presidency of Professor Gussenbauer (Vienna). After the introductory proceedings the President mentioned that American surgeons propose to hold international surgical congresses at regular intervals and ask this meeting to approve of their intention. The Congress was of opinion that a more detailed programme ought to be brought before it, and authorised the President to take the necessary steps to this end.

Cerebral Surgery.

Professor von Bergmann (Berlin) read a paper on the Progress of Cerebral Surgery. He said that although increased knowledge of the physiology and pathology of the brain had enabled surgeons to deal with cerebral diseases much circumspection was necessary in this branch of surgery. The procedure in operations on the brain is now quite different from what it formerly was. Instead of the chisel and the trephine we now use a circular saw driven by an electric engine, which works with speed and certainty and can easily

be stopped. He would not to-day speak on the subject of tumours, but only on the other indications for operative interference. In 1889 he had suggested that Jacksonian epilepsy might be influenced for the better by trephining, but he now wished to modify this opinion, as he had found only those cases benefited where a cyst or some other palpable cause of the disease was present. Cerebral abscess must always be operated on. Its diagnosis is easy if the etiology is considered. The principal cause of cerebral abscess is inflammation of the middle ear; it is usually situated in the temporal lobe. The operation in those cases should commence with the tegmen tympani. A decided advance is the operation for suppurative thrombosis of the sinus, which, of course, often follows suppuration within the mastoid process. The sinus can be arrived at from the tegmen tympani. In the first place, an exploratory puncture is made, and if it yields pus the opening must be enlarged and filled with iodoform gauze. In cases of increased cerebral pressure trephining is to be performed also, the effect of the puncture lasting for only a short time. The puncture of the spinal canal in the lumbar region suggested by Professor Fürbringer, and mentioned in the last number of THE LANCET, Professor Bergmann believed to be of great diagnostic value.

Dr. Ledderhose (Strasburg) had seen a case of cerebral injury where paralysis of the limbs was on the same side as the lesion of the brain. Several cases of this kind have been reported in surgical literature, and are caused by congenital abnormalities in the decussation of the cerebral fibres.

Dr. Eiselsberg (Vienna) described the methods of closing apertures in the skull. These apertures, he said, may arise from three causes—traumatic lesions, the effects of zymotic diseases, and neoplasmata. They can be dealt with in two ways: by König's method, which consists in covering them with periosteal flaps; or by that of Fraenkel, who uses plates of celluloid. In one case after the implantation of the celluloid an epileptiform convulsion ensued, so that he was compelled to remove the celluloid and then found a large hæmatoma beneath it. He therefore advises the performance of two separate operations.

Dr. Fraenkel (Vienna) claimed as an advantage of the celluloid implantation that it prevents adhesions of the dura mater, which sometimes happen in cases where König's operation is performed.

Dr. Czerny (Heidelberg) said that he had not been so fortunate as others in applying celluloid plates. He recommended the implantation of pieces of the tibia.

The Surgical Treatment of Graves' Disease by Extirpation of the Thyroid Gland.

Professor Mikulicz (Breslau) discussed the Surgical Treatment of Graves' Disease by Extirpation of the Thyroid Gland. He has performed this operation several times with good results. The nervous symptoms very soon disappeared after the operation, and the general state of the patient became better. The next effects are decrease of the cardiac trouble, and ultimately of the exophthalmos. As a proof of the good effect of the operation, Professor Mikulicz asserted that he had never seen patients so grateful as those who had been operated on. He does not believe that the operation only acts by means of suggestion. He is of opinion that Graves' disease must be regarded as a toxic process originating in the thyroid gland.

Professor Kocher (Berne) reported that in the last 900 cases operated on by him the method of total extirpation was wholly abandoned, and only the partial operation was performed. Since proceeding in this way he has not had any cases of cachexia strumipriva except in one instance, where the remaining part of the gland was found to be atrophied. This case was cured by the internal administration of thyroid gland. Although he was well satisfied with his results, the mortality being only 12 per cent., he hoped that the number of operations would soon be reduced, and that internal medication would be substituted. He made a very remarkable communication, describing the influence of the internal administration of thyroid extract and phosphate of potassium, and showed several photographs of patients where the reduction of the gland after the use of these internal remedies was very obvious. His address was listened to with much interest, and caused a great sensation.

Professor Mikulicz said that the internal use of thymus gland was also able to reduce the goitre.

Professor von Eiselsberg (Utrecht) had not found this to be the fact in his experience.

Dr. Schuchardt (Stettin) showed a case in which suppurating peritonitis, caused by a perforating ulcer of the stomach, had been successfully treated by operation.

SECOND SITTING, ON APRIL 18TH.

The Etiology of Movable Kidney.

Professor Küster (Marburg) discussed the Etiology of Movable Kidney. He was of opinion that this condition always arises from mechanical causes. During respiratory action, especially in women who wear tightly laced corsets, and whose abdominal walls have become thin by reason of repeated pregnancy, the ribs exercise a pressure which in course of time loosens the kidney. Direct violence, such as a fall or a blow, may also be the cause of the displacement. Rupture of the kidney in men and movable kidney in women arise often from the same cause. It is remarkable that 93 per cent. of the total cases of rupture of the kidney happen in men and only 7 per cent. in women, whereas 93 per cent. of the cases of movable kidney occur in women and only 7 per cent. in men.

Dr. Lindner (Berlin) said that mechanical causes alone were not sufficient to explain these cases; traumatic lesions produce movable kidney only when a congenital disposition exists. The lengthening of the renal vessels proves that the cases are congenital.

Dr. Küster replied that this lengthening of the renal vessels is only found in patients who have for a long time been the subjects of this condition, and that it must accordingly be regarded as a consequence and not as a cause of the abnormality.

Dr. Kölliker (Leipzig) reported a case where after a severe injury (a boy had been thrown into the air by four others and had fallen on his lumbar region) a rupture of the kidney was produced. The wound was enlarged and filled with iodoform gauze, thereby avoiding the necessity for extirpation. The boy completely recovered, and his urine is at present normal.

A Series of Operations on the Stomach.

Professor Mikulicz reported 103 Operations on the Stomach with 23 deaths. It was remarkable that 13 deaths in 35 patients happened during the first ten years, whilst in the last three years and a half out of 68 patients 10 only died. This fact proves that the results are rendered more and more satisfactory by the improvements in surgical methods and by the increasing dexterity of the surgeon. The non-success of operations for carcinoma depends on the weakness of the patient. To improve their general state he uses subcutaneous injections of saline solutions. When the practicability of an operation is doubtful he recommends the making of a very short abdominal incision from 2 to 4 centimetres in length (= from ¾ to 1½ in.), so that one finger may be introduced and the abdominal organs explored. If an operation is inadvisable the small wound can easily be closed by sutures and the patients need not be confined to bed. After gastro-enterostomy the patients lived on an average for six months, but after resection for a year and a half. He accordingly prefers the latter operation, those cases of course excepted where the lymphatic glands and the peritoneum are attacked. The operative procedures, Professor Mikulicz said, could scarcely be improved, but an earlier diagnosis might be the means of saving many cases.

Dr. von Eiselsberg recommended the excision of the growth and the closing of the ends both of the stomach and of the duodenum by sutures. This done, a regular gastro-enterostomy follows, and the chyme easily passes through the new aperture.

Dr. Doyen (Rheims) said that the pain in nearly all painful diseases of the stomach is localised in the pylorus. Dilatation of the stomach arises, in the absence of any mechanical cause, from spasmodic contractions of the pylorus. Seven patients who suffered from severe dyspepsia and fourteen who were the subject of gastric ulcer without stenosis were completely cured by gastro-enterostomy.

Dr. Fischer (Strasburg) said that in gastrostomy a secure union of the stomach with the abdominal walls may be difficult. In such cases he recommended that the stomach should not be opened, but that the patient should be fed by a cannula similar to Pravaz's, but of course much larger. He pushes the cannula through the walls of the stomach lying in the abdominal wound and injects a quantity of fluid food, milk, &c. In course of time the opening in the stomach is enlarged and a fistula is formed.

Intestinal Invagination.

Dr. Rydygier (Cracow) discussed Intestinal Invagination.

The cases are usually treated too long by internal remedies, and accordingly come too late to a surgeon. The mortality is, therefore, very high (75 per cent.), especially in acute cases. The treatment in both the acute and the chronic form should consist in immediate laparotomy. Disinvagination should always be tried; if it does not succeed resection of the intestines becomes necessary. He has had twelve cases, of which three were successful, whilst according to former statistics none of the patients recovered. Entero-anastomosis and the formation of an artificial anus should never be attempted, the result of these operations always being rapid inanition.

(To be continued.)

THE REPORT OF THE ROYAL COMMISSION ON OPIUM.

THE Royal Commission appointed in June, 1893, to inquire into the question of the Indian traffic in opium was admittedly composed of men eminently qualified to conduct such an investigation, and they have, after an unusually protracted and exhaustive inquiry, at length made their report. The result can only be described as a crushing blow to the anti-opium faddists. A very large amount of evidence was taken, of such variety, strength, and character as to leave no doubt on the subject. There was a marked preponderance of testimony in favour of the view that the common use of opium in India is a moderate use leading to no evident ill-effects, and that excess is exceptional and condemned by public opinion. Such is the gist of the report which, with one dissentient (Mr. H. J. Wilson, M.P.), was signed the members (nine in number) of the Commission. The truth is that however well meaning the anti-opium party in this country may be their statements, when brought to the test of facts and impartial inquiry, have been shown to have been either ridiculously exaggerated or even altogether unfounded. We must take human nature as it is, as it exists all the world over irrespectively of the colour of the skin, and nowhere do we find that men and women regulate their life and customs by some abstract rule of perfection, for the very simple and sufficient reason that they cannot. The needs and requirements of life, its burdens as well as its joys, the hunger, fatigue, weariness, sickness, or *ennui* that falls to the lot of so many, have to be taken into account as well as its sources and seasons of joyfulness and exhilaration. In a large measure the conditions of our lot in life mould us into what we are, and everywhere give rise to a craving of some sort or other for such things as will exhilarate or soothe us and, if even temporarily and delusively, bring us into harmony with an environment out of which we cannot escape. But are we in a position in this matter to cast a first stone at Eastern nations? If we reverse the situation and suppose that the natives of India had sent a commission to this country to inquire into the drink question—into the sum spent per head by our population on alcohol, and the degradation, misery, and crime which are too often the outcome of it all—can there be any reasonable doubt that the evils traceable to alcohol here would appear to such a commission enormous, and those arising from the abuse of opium there, in India, altogether insignificant in comparison with them. No doubt the inordinate use of opium is a great evil, but so for that matter is an inordinate consumption of tea or tobacco. But the use of opium, if common enough in the populations of India, is nevertheless a moderate use and has not been shown to be by any means harmful—rather the reverse considering the conditions to which the people are exposed and under which they have to live. The medical and expert evidence brought before the Commissioners convinced them that the use of the drug was not harmful, and witnesses from every part of India testified to the belief in opium as the common domestic medicine of the people, and that it was commonly had recourse to by the rural population in malarious and damp districts as a prophylactic against fever and for the relief of diarrhœa, rheumatism, and other complaints. Quite apart from the merits of this belief the Commission considers that its existence has been conclusively established by such a mass of evidence and observation as to represent public opinion on the subject. In fact, the Commission which many hoped had gone out to curse the existing system has ended by blessing it altogether. Opium is, under certain circumstances, a sort of diet to many of the poorest classes in India—and the poorest are extremely poor there; it economises the fuel and eases, as it were, the animal machine of the hard-working coolie in times when the demands upon his muscular and nervous energies are great and his food-supplies small. The Mussulman troops take their dose of opium with far less injury to themselves than the navvy takes his beer or the miner in the Peruvian Andes consumes his coca leaf. A prohibition of the growth of the poppy and the manufacture of opium in British India, the Commission declares, has not been shown to be necessary or to be demanded by the people; and as regards its prohibition in the protected States it could only be effected by an arbitrary exercise of power which would probably be resisted by the native rulers and their people; in brief, the prohibition of opium would be strongly opposed by the great mass of the population of India and a source of financial embarrassment to its Government. The report is a long one, and there is also a memorandum appended to it by Sir J. B. Lyall on the historical part of the question in India and China, and a very able paper by Sir W. Roberts dealing more especially with the medical aspect of the question.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns 6407 births and 4127 deaths were registered during the week ending April 20th. The annual rate of mortality in these towns, which had declined in the six preceding weeks from 35·0 to 20·5 per 1000, further fell last week to 20·3. In London the rate was 18·8 per 1000, while it averaged 21·4 in the thirty-two provincial towns. The lowest rates in these towns were 16·1 in Bradford and in Derby, 16·4 in Cardiff, 16·8 in Nottingham, and 17·0 in Oldham; the highest rates were 26·3 in Salford, 26·6 in Blackburn, 27·8 in Huddersfield, 29·7 in Manchester, and 34·5 in Bolton. The 4127 deaths included 336 which were referred to the principal zymotic diseases, against 274 and 330 in the two preceding weeks; of these, 115 resulted from whooping-cough, 89 from measles, 57 from diphtheria, 31 from diarrhœa, 24 from scarlet fever, 19 from "fever" (principally enteric), and one from small-pox. The lowest death-rates from these diseases were recorded in Bristol, Nottingham, Derby, Halifax, and Bradford; while they caused the highest rates in West Ham, Norwich, Bolton, Manchester, and Salford. The greatest mortality from measles occurred in Plymouth, Manchester, and Bolton; and from whooping-cough in Swansea, Oldham, Wolverhampton, Blackburn, Salford, and Burnley. The mortality from scarlet fever and from "fever" showed no marked excess in any of the large towns. The 57 deaths from diphtheria in the thirty-three towns included 30 in London, 5 in West Ham, and 5 in Manchester. One fatal case of small-pox was registered in Liverpool, but not one in London or in any other of the thirty-three towns. There were 35 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, the 20th inst., against 55, 53, and 47 at the end of the three preceding weeks; 4 new cases were admitted during the week, against 11, 7, and 9 in the three preceding weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 1514, against 1555, 1519, and 1463 on the three preceding Saturdays; 162 new cases were admitted during the week, against 161, 143, and 117 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 427 and 398 in the two preceding weeks, further declined to 389 last week, but slightly exceeded the corrected average. The causes of 79, or 1·9 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Nottingham, Bradford, Leeds, and in ten other smaller towns; the largest proportions of uncertified deaths were registered in West Ham, Birmingham, Blackburn, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns,

which had been 24·7 per 1000 in each of the two preceding weeks, declined to 21·7 during the week ending April 20th, but exceeded by 1·4 per 1000 the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 18·2 in Dundee and 19·3 in Greenock to 24·9 in Leith and 25·0 in Aberdeen. The 626 deaths in these towns included 32 which were referred to measles, 17 to whooping-cough, 10 to diarrhœa, 8 to small-pox, 7 to diphtheria, 4 to scarlet fever, and not one to "fever." In all, 78 deaths resulted from these principal zymotic diseases, against 74 and 88 in the two preceding weeks. These 78 deaths were equal to an annual rate of 2·7 per 1000, which was 1·0 per 1000 above the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of measles, which had been 22 and 30 in the two preceding weeks, further rose to 32 last week, of which 10 occurred in Leith, 7 in Edinburgh, 5 in Glasgow, and 5 in Paisley. The 17 deaths referred to whooping-cough showed a decline of 13 from the number in the preceding week, and included 14 in Glasgow. Of the 8 fatal cases of small-pox 7 were recorded in Glasgow and 1 in Edinburgh. The deaths from diphtheria, which had been 2 and 3 in the two preceding weeks, further rose to 7 last week, of which 3 occurred in Glasgow and 2 in Edinburgh. The fatal cases of scarlet fever, which had been 5, 2 and 6 in the three preceding weeks, were 4 last week and included 3 in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 189 and 161 in the two preceding weeks, further declined to 132 last week, but were 27 above the number in the corresponding week of last year. The causes of 27, or more than 4 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had declined in the three preceding weeks from 43·6 to 29·2 per 1000, rose again to 29·7 during the week ending April 20th. During the past three weeks of the current quarter the death-rate in the city has averaged 34·1 per 1000, the death-rate during the same period being 19·0 in London and 20·2 in Edinburgh. The 199 deaths registered in Dublin during the week under notice showed a slight increase upon the number in the preceding week, and included 3 which were referred to the principal zymotic diseases, against numbers declining from 12 to 6 in the three preceding weeks; of these, 1 resulted from small-pox, 1 from scarlet fever, 1 from "fever," and not one either from measles, diphtheria, whooping-cough, or diarrhœa. These 3 deaths were equal to an annual rate of 0·4 per 1000, the zymotic death-rate during the same period being 1·7 in London and 2·9 in Edinburgh. The fatal cases of small-pox, which had been 3 and 2 in the two preceding weeks, further declined to 1 last week. The death referred to scarlet fever was the first recorded within the city since February last. The 199 deaths registered in Dublin last week included 39 of infants under one year of age and 65 of persons aged upwards of sixty years; the deaths of infants showed an increase, while those of elderly persons showed a further decline from those recorded in recent weeks. Two inquest cases and 3 deaths from violence were registered; and 60, or nearly a third, of the deaths occurred in public institutions. The causes of 24 or more than 12 per cent., of the deaths in the city last week were not certified.

VITAL STATISTICS AND VACCINATION IN EGYPT.

The Egyptian Sanitary Department has issued an interesting tabular statement showing the number of births, deaths, vaccinations, and revaccinations that were registered throughout the entire country during 1893 but unfortunately, owing to the non-existence of an accurate census, the compilation is shorn of well nigh half its value. The only Egyptian census of recent times was taken in 1882 the year of the Arabi disturbances, and, as might be expected, the results are now pretty generally admitted to be altogether untrustworthy. According to the 1882 estimate—for it is a misnomer to call the document a census—the population of Egypt at that time consisted of 6,817 265 souls, of whom 225 216 were said to be nomads. but the statistics now issued go far to prove that the total number of sedentary inhabitants was greatly understated. During the year 1893 314,929 births and 190,305 deaths were registered amongst the native portion of the community. Taking the population at 7,000,000, these figures give a birth-rate of 45 and a death-rate of 27 per 1000, both far above the average; whereas if we adopt 8 000,000 as more probably representing the real number of Egyptians the ratios fall to 39·3 and 23·8 per 1000 respectively, a condition of things more in accordance with the rates obtaining elsewhere. It must also be borne in mind in this connexion that registration in Egypt is in its infancy, and that, chiefly with a view to avoid the conscription, the tendency in many districts is to avoid in every possible way the inscription of births. Returning to the document in hand, we find that 1988 foreigners died in Egypt during the year 1893; and that the births in the same category numbered 1021. As regards vaccination 300 447 primary operations were performed with success and 2391 with non-success, these totals being together equal to upwards of 95 per cent. of the births; 1686 revaccinations were carried out with satisfactory results, but in 407 instances the subjects proved refractory. At Suakin alone did the deaths (167) outnumber the births (64); and it is noteworthy that the vaccinations without success, which elsewhere were inconsiderable, should have amounted in this district to nearly one-third of the total number. The birth-rate may be said to have been exceptionally high throughout the whole country, but in Upper Egypt it was still more remarkable. In the provinces of Minieh, Assiout, Guirgueh, and Keneh there were in the aggregate 72,484 births and only 33,170 deaths, considerably less than half. At that rate the population ought to increase. From a footnote we learn that the declaration of births and deaths is obligatory among natives only. Deaths occurring amongst foreigners have, however, to be verified, and permits for burial are only issued on the certificate of a recognised medical man or sanitary agent. Natives and foreigners are alike bound by the decree which renders vaccination compulsory (Dec. 17th, 1890). To any person who was conversant with Egypt under the old *régime* the valuable information so unostentatiously furnished in this brief document must afford conclusive proof of the immense progress that has taken place since England entered into occupation in 1882. Ten years ago it would have been simply impossible to have rendered such a return. Ten years ago registration was practically unknown, and vaccination nearly so. The latter duty was in the hands of the village barbers, who were in the habit of keeping the vaccine—mixed with scab matter and blood—between two *plaques* of dirty glass. Immense progress has unquestionably been made, but the want of a census renders the work of the registration department trebly hard. Dr. Eogel Bey has worked unceasingly and untiringly at his important task, and richly merits a reward. There is probably no country in the world where a census could be so easily taken as in Egypt, or where the cost would be less.

THE SERVICES.

ARMY MEDICAL STAFF.

BRIGADE-SURGEON-LIEUTENANT-COLONEL GEORGE ANDREW, M.B., retires on retired pay (dated April 24th, 1895). The under-mentioned Surgeon-Majors to be Surgeon-Lieutenant-Colonels:—Henry Charlesworth; John C. Dorman, M.B.; George H. Le Mottée, M.D.; William L. Chester, M.B., Edward A. Mapleton, M.B.

INDIA AND THE INDIAN MEDICAL SERVICES.

Brigade-Surgeon-Lieutenant-Colonel W. R. Hooper, Indian Medical Service, is granted the temporary rank of Surgeon-Colonel whilst President of the Medical Board, India Office. The following appointments are announced:—Surgeon-Captain J. S. S. Lumsden, to Medical Charge of the 40th Bengal Infantry; Surgeon-Captain G. H. Frost, from 22nd Bengal Infantry, to Medical Charge of the 45th Sikhs; Surgeon-Major G. S. A. Ranking, Secretary to the Board of Examiners, Calcutta, temporarily to the Charge of that portion of the office of the Home Department which is in Calcutta when the Government of India are at Simla; Surgeon-Captain C. H. James, on duty with the Sanitary Commissioner, Punjab, to officiate as Civil Surgeon of Rohtak; Surgeon-Lieutenant P. P. Kilkelly, to officiate in Medical Charge, 4th Bombay Cavalry; Surgeon Lieutenant B. H. F. Leumann to Medical Charge, 17th Bombay Infantry; Surgeon-Captain E. G. R. Whitcombe to Medical Charge,

8th Bombay Infantry. The services of Surgeon-Captain A. W. T. Buist-Sparkes, M.B. (Bengal), are placed temporarily at the disposal of the Government of the Punjab. Surgeon-Major James Cleghorn, M.D., to be Surgeon-General and Sanitary Commissioner with the Government of India; Surgeon-Colonel D. O'C. Raye, M.D., to be Inspector-General of Civil Hospitals, Punjab; Surgeon-Colonel J. H. Newman, M.D., to be Administrative Medical Officer and Sanitary Commissioner of the Central Provinces; Surgeon-Colonel W. P. Warburton, M.D., to be Inspector-General of Civil Hospitals, North-West Provinces and Oudh. Brigade-Surgeon-Lieutenant-Colonel M. M. Gallwey returns to Bombay on relief by Surgeon-Colonel Maunsell. Surgeon-Captain A. G. Moores, A.M.S., has left Lucknow for Peshawar to do duty with the General Hospital for British Troops, Chitral Relief Force. Brigade-Surgeon-Lieutenant-Colonel J. Smith, Madras, retires from the service on a pension of £500 per annum. The Queen has approved of the following promotions among the officers of the Indian Medical Services, and they are accordingly gazetted:—*Bengal Medical Establishment:* To be Brigade-Surgeon-Lieutenant-Colonel: Surgeon-Lieutenant-Colonel Frederick Augustus Smyth. To be Surgeon-Captain: Surgeon-Lieutenant Bruce Gordon Seton. *Madras Medical Establishment:* Surgeon-Lieutenants to be Surgeon-Captains: Robert Henry Elliot, Robert King Mitter, Wilfred Ernest Arbuthnot Armstrong. *Bombay Medical Establishment:* To be Surgeon-Captain: Surgeon-Lieutenant William Carr Sprague, M.D. Her Majesty has also approved of the retirement from the service of the under-mentioned officer: Surgeon-Lieutenant-Colonel Thomas Robinson, Bengal Medical Establishment.

NAVAL MEDICAL SERVICE.

Fleet-Surgeon George Curtis has been placed on the Retired List at his own request, with permission to assume the rank of Deputy Inspector-General of Hospitals and Fleets.

The following appointments are announced:—Fleet-Surgeon William E. Bennett to Sheerness Dockyard. Staff-Surgeons: J. L. Barrington to the *Inflexible;* C. W. Sharples to the *Unicorn*, temporary, Surgeon A. F. Harper to the *President*, additional.

MILITIA MEDICAL STAFF CORPS.

Harold Edward Mortis, Gent., to be Surgeon-Lieutenant.

VOLUNTEER CORPS.

Rifle: 2nd Volunteer Battalion, the Suffolk Regiment: The under-mentioned Surgeon-Lieutenants are appointed Second Lieutenants:—Henry Cecil Harper. Charles Franklin Wright. 2nd Volunteer Battalion, the East Surrey Regiment: The under-mentioned Gentlemen to be Surgeon-Lieutenants:—Thomas Brushfield, M.B., Frederick Robert Hird. 1st Volunteer Battalion, the Royal Sussex Regiment: Surgeon-Lieutenant C. W. J. Chepmell, M.D., to be Surgeon-Captain. 1st Dumbartonshire: Surgeon-Lieutenant-Colonel J. E. Brodie, M.D., from the 3rd Volunteer Battalion, the Highland Light Infantry, to be Surgeon-Lieutenant-Colonel.

VOLUNTEER INFANTRY BRIGADES.

Clyde Brigade: Surgeon-Lieutenant-Colonel J. E. Brodie, M.D., 1st Dumbartonshire Volunteer Rifle Corps, to be Brigade-Surgeon-Lieutenant-Colonel.

THE HEMP DRUGS COMMISSION.

The Commission of Inquiry instituted by the Indian Government examined 700 witnesses. Its report, with a resolution of the Governor-General-in-Council thereon, has recently been published. As a result of the inquiry it appears that there are no such marked ill-effects, physical, mental, or moral, attendant on the use of hemp drugs as were popularly ascribed to them before the present inquiry was made. There was a complete break-down in the evidence in support of the popular impression that these drugs are a fruitful source of insanity. There has, in fact, been a great deal of popular prejudice and exaggeration as to the evil effects arising from the use of hemp drugs and ganja. Those interested in the matter may be referred to an article in the *Times* of the 22nd inst., under the head of "Indian Affairs," which deals fully with the subject. The Government of India refuses to entertain any measures for total prohibition, but is willing to put restrictions compatible with fairness on the use of hemp drugs.

FILTERS AND INFECTIOUS DISEASES.

We are glad to notice that, under the above heading, the *Pioneer Mail* of the 4th inst., calls attention to the fact that the water filters commonly used in India are "little better than microbe traps." We have frequently adverted to this subject, and to the delusive nature of the reliance that is placed in filters in general use as a safeguard against the communication of water-borne disease. They afford no real protection against the micro-organisms of cholera and typhoid fever. The evidence obtained in the French Army, on the other hand, on the use of the Pasteur-Chamberland filter is most favourable, and M. de Freycinet has called attention to the remarkable effect which the introduction of this filter has had in diminishing the prevalence of enteric fever in that army. We have more than once suggested that this or the Berkefeld filter, should be experimentally tried in India as a substitute for the ordinary barrack filter now used there.

LEPROSY IN INDIA.

The decision of the Government of India in regard to the leprosy question in that country, about which it will be remembered there was a Commission of Investigation some time ago, has been published in the *Gazette of India*. The Government considers that the extent to which leprosy is propagated by contagion is small, and is, therefore, unable to approve of the compulsory segregation, either absolute or partial, of lepers, except those who are vagrants. The alarm about the increase of leprosy in India is said to be groundless. The Governor-General in Council has no reason to dissent from the general conclusion of the Leprosy Commission that leprosy does not prevail in India to such an extent as to constitute a general or universal danger, and that the means by which we must look forward to secure its diminution are improved sanitation and better dietetic conditions.

DEATH IN THE SERVICES.

Deputy Surgeon-General Samuel Stacy Skipton, M.D. (retired), A.M.S., aged sixty-five, at his residence in Cheshire, on Easter Sunday. He graduated at St. Andrews University in 1852 and joined the Army in 1854. In 1866 he was appointed surgeon; was promoted to surgeon-major in 1873 and brigade-surgeon in 1884; and retired with the hon. rank of deputy surgeon-general in 1885. He was attached to the 49th Regiment in the Crimea from July 23rd, 1855, including the siege and fall of Sebastopol (medal with clasp and Turkish medal), and to the 14th Light Dragoons in the Central India campaign under Sir Hugh Rose in 1858; and was mentioned in despatches.

THE COMMANDER-IN-CHIEF.

Some of our readers will probably have noticed that Mr. Morton asked the Secretary for War whether the Commander-in-Chief was about to resign, and, if so, whether the Government intended to carry out the recommendation of the Hartington Commission. Mr. Campbell-Bannerman, in reply, said that he had no knowledge of there being any foundation for the rumour referred to. As regards the course to be followed on the occurrence of a vacancy, he repeated what he had said in September, 1893, that after the recommendation made by the Royal Commission he could not conceive of any appointment of a permanent nature being made to the post of Commander-in-Chief.

VOLUNTEER OFFICERS' DECORATION.

The Queen has conferred the Volunteer Officers' Decoration upon the under-mentioned Officers of the Volunteer Force:—*North-Eastern District: Rifle:* 2nd Volunteer Battalion, the Princess of Wales's Own (Yorkshire Regiment): Surgeon-Lieutenant-Colonel William Taylor Colby, M.D. *North-Western District: Artillery:* 5th Lancashire: Honorary Assistant Surgeon William Henry Cocker. *Eastern District: Rifle:* 3rd (Cambridgeshire) Volunteer Battalion, the Suffolk Regiment: Surgeon-Captain Francis Mears Beckett.

SALE OF POISONS IN INDIA.

Out of twenty-five cases of poisoning brought to notice last year in Burmah the chemical examiner says fifteen were cases of arsenic poisoning. This supplies, the *Pioneer Mail* remarks, additional evidence in favour of the proposals made to the Indian Medical Congress by Surgeon-Captain Evans for restricting the sale of arsenic.

The office of the Principal Medical Officer of the Madras Army is to be permanently removed from Madras to Ootacamund.

The *Malabar* sailed from Bombay on April 4th, with sixty-seven patients for Netley.

Sixteen invalids left China on April 14th for Netley.

Correspondence.

"Audi alteram partem."

"PROPHYLAXIS OF INSANITY."

To the Editors of THE LANCET.

SIRS,—Dr. Blandford, in his address on the Prophylaxis of Insanity, refers to the all-important question of marriage. In an article I wrote in the *Journal of Psychological Medicine*, vol. vii., in 1881, I gave some rules for the guidance of those who consulted me on the subject. I had previously written on the same subject in the same journal in 1875. In our present ignorance of the origin of the mysterious inheritance of disease I can only offer these rules as of approximative value. I must premise that these rules have a wide bearing, as they not only have regard to insanity, but to *all* hereditary diseases, for in a treatise I wrote on the Nature and Treatment of Hereditary Diseases in 1869 I contended that *all* hereditary diseases are interchangeable. 1. If there be a constitutional taint of any kind in either father or mother on both sides of the contracting parties, the risk is so great as almost to amount to a certainty that their offspring would inherit some form of disease belonging to the class to which these investigations refer. 2. If the constitutional disease is only on one side, either directly or collaterally through uncles or aunts, and the contracting parties are both in good bodily health, the risk is diminished one-half, and healthy offspring may be the issue of the marriage. 3. If there have been no signs of constitutional disease for a whole generation we can scarcely consider the risk materially lessened, as it so frequently reappears after being in abeyance for a whole generation. 4. If two whole generations have escaped any symptoms of hereditary disease we may fairly hope that the danger has passed and that the morbific force has expended itself.

I am, Sirs, your obedient servant,

Goldhurst-terrace, Hampstead. J. M. WINN, M.D.

"INTERSTITIAL KERATITIS AND SYNOVITIS."

To the Editors of THE LANCET.

SIRS,—Dr. Crawford Thomson, in THE LANCET of April 6th, alluded to a paper of mine written in 1870,[1] in which I reported four cases of parenchymatous keratitis associated with acute rheumatism. Since 1870 my views on that and many other subjects have undergone important modifications. That paper was, as I now acknowledge, a somewhat crude attempt to explain what was then, and still remains, a difficult problem. The association of synovitis with interstitial keratitis was then a very unfamiliar phenomenon. Mr. Jonathan Hutchinson had indeed recorded two cases and had recognised synovitis as an occasional feature of inherited syphilis. Very few cases, however, had then been recorded, and even now their number hardly justifies the construction of a theory. I am inclined, however, to subscribe to Dr. Crawford Thomson's views as being on the whole most in harmony with the recorded facts. I would venture to put the matter in the following form. A certain cachexia, whether it be in the form of anæmia or *misère*, is favourable to the development of parenchymatous keratitis and to synovitis. This particular cachexia may be arrived at either by the road of inherited syphilis or by other roads, such as disordered menstruation, and a slight local exposure to irritation or injury sets up the local mischief. Still, the number of recorded cases without some indications of inherited syphilis, and even those with those indications, is so small that I do not think it is as yet safe to generalise. The proposed experiments on the joints which Dr. Crawford Thomson promises to undertake and record will be most valuable; but I cannot quite accept the conclusions drawn by Dr. Crawford Thomson from Wagenmann's experiments on the artificial production of keratitis. Dr. Crawford Thomson's paper is most suggestive, and it is hoped that his future researches may lead to some definite conclusions. There is, however, one point which should not be omitted—viz., the records of the temperature chart. These were omitted in my four cases, as Dr. Crawford Thomson justly points out, but he falls into the same error in recording his own unique case of "unilateral keratitis with unilateral synovitis." He remarks simply that there was "no feverishness," but gives no details as to temperature, which might have afforded valuable hints, especially as to the probability of there being any rheumatic complications. In Mr. Clutton's valuable paper in THE LANCET of Feb. 27th, 1886, there is the same omission.

I am, Sirs, yours obediently,

W. SPENCER WATSON.

Henrietta-street, W., April 18th, 1895.

[1] Transactions of the Clinical Society, vol. iv., pp. 1-7.

"THE LONDON AND MANCHESTER INDUSTRIAL ASSURANCE COMPANY, LIMITED."

To the Editors of THE LANCET.

SIRS,—As I was a referee to the above company I have taken considerable interest in the correspondence in your columns respecting it. I think the directors must be aware, or if not this correspondence will have opened their eyes to the fact, that a class of people have gained and are gaining entrance to their medical aid society whose incomes are far from "meagre" and who are quite in a position to pay proper charges for medical attendance; and, further, that the presence of such people in a medical aid society is giving rise to a feeling in the medical profession strongly adverse to the well-being of such societies. Certain of your correspondents have pointed out instances of such abuse, and most of those who have written in defence have admitted that such abuses exist.

Now, Sirs, I have on my list many members whom I am pleased to attend for the remuneration offered by this company, but I have also on my list far too many others whose position or income is such that I would infinitely rather attend for nothing than receive the small sum paid per annum for them and consider that it discharges their obligation to myself. I quite think, Sirs, that the directors do not wish for such people, who usually enter singly; but the local agents like them—they pay regularly, do not require to be called on weekly for premiums, and insure for higher sums, paying 3*d.* or more weekly. In consequence of this, harm is done to the poor struggling member who has entered his wife or children, paying 1*d.* for each weekly as premium. The better-class or richer member entering frequently with some ailment of gravity, quite able to pay, gets and requires ten or twenty times the attendance for just the same sum as his poorer neighbour, who has entered his fairly healthy family, a uniform charge of 1½*d.* per week for medical aid being added to each premium, no matter what that premium may be, and so the poor man is paying for the richer, whose presence as a member is threatening the existence of a society which was established, I take it, for such people as the former. I would point out, Sirs, to the directors that a very few well-off members can do this. Say that out of a list of 100 members for whom the remuneration paid by the company at 4*s.* per member would come to £20 a year, there are 10 or even 5 per cent. able to pay an account of a few pounds each. This would cover, or more than cover, the yearly stipend of the whole, and a grave wrong is done to the profession. Five or ten per cent. out of the hundreds of thousands of members this company possesses would make a goodly array, and their exclusion from such societies would be a benefit alike to the really poor man and to the medical practitioner. I think, Sirs, I could show the directors a remedy to a considerable extent for this evil—namely, to make the local agents submit all proposal forms to a medical referee. I have been told that a referee, who is or was a director himself, examines everyone proposed in his district. Let the directors allow similar liberty to all referees and instruct their agents to inform all proposing to enter that the medical referee may refuse to accept or may claim the right to examine, and the well-off and the unhealthy members will disappear and the greatest grievance against this and kindred companies will be removed. I know at present the company will remove members objected to by medical officers, but in that case such members, once they are admitted, feel themselves to have a distinct grievance against the referee and company; besides, this is not going far enough: if they are to be stopped let them be stopped in the beginning before they become members, and let such companies instruct their

agents that well-to-do people are not under any circumstances to be proposed for medical aid.

I am Sirs, yours faithfully,

April 22nd, 1895. A REFEREE.

"THE TITLE OF 'DOCTOR.'"

To the Editors of THE LANCET.

SIRS,—Dr. Campbell Black in the latter portion of his letter in THE LANCET of March 16th has exposed an old sore without suggesting a likely remedy. Practice for gain in any department of medicine or surgery is not forbidden by law to persons who do not possess a valid qualification; and so long as he does not pretend to be legally qualified by adoption of titles specifically designated in the Medical Act there is nothing to prevent any individual, educated or not educated, from practising. The law is also very largely violated with impunity because there exists no public body or functionary charged with its enforcement; but the fact that the Dental Association, which has taken up the duty of public prosecutor on behalf of the speciality, has never ventured to attack one of the numerous unqualified quack dentists who adopt the title of Doctor is enough to suggest the difficulties which lie in the way of vindication of the law. That construction of laws for protection of the public and professions is not beyond the power of statesmen is sufficiently evident. An attempt by an unqualified man to practise as a solicitor meets with speedy punishment, and such an abuse as assumption of titles and practice by unqualified adventurers in the legal profession is virtually impossible. By the Veterinary Surgeons Act, 1881 similar protection is afforded the veterinary profession, and under it unqualified farriers have been punished merely for displaying a sign inscribed "Veterinary forge." The public are thus prevented so far as possible from mistaking unqualified pretenders for educated practitioners; and dumb brutes are also thus far safeguarded against the torments which unscientific "veterinary surgery" so often inflicts upon its victims. The Medical Act devised to provide for men protection the same as the Veterinary Act affords to brutes dates from 1858; the Dentists Act from 1878. Under neither of these Acts has any serious attempt been made to check the evils they were intended to prevent; and in no instance have proceedings under these Acts been taken against infamous quacks known to professional authorities, and often to the police, as men openly pursuing a career of crime. It can, I believe, be proved that quackery forming a potent factor in deterioration of the public health puts money ultimately into the pockets of legitimate practitioners; but if the unselfishness of the profession in seeking to put a stop to glaring abuses cannot be proved it can at any rate be demonstrated that enforcement of stringent laws would operate in the main for the benefit of the classes whose claim upon the guardianship of the State is surely paramount. It can hardly be believed that amendment of the law would be long delayed if once the case, supported by the voice of the profession, were fully and fairly laid before the Legislature.

I am, Sirs, yours faithfully,

Cavendish-square, March 16th, 1895. HENRY SEWILL.

To the Editors of THE LANCET.

SIRS,—Mr. J. B. Pike deserves the thanks of all lovers of justice for his able and spirited defence of the rights and privileges of physicians. It is a fact well known to the public and the profession that a physician is a doctor, though it is not every doctor who is a physician. Let me recommend all carping critics to look out the word doctor in any good *English* dictionary, and then reflect upon their own small-mindedness. Until the year 1859 it was a *sine quâ non* that a candidate for the L.R.C.P. Edin. should be an M.D; and no M.D., no matter from how eminent a university, could practise as a physician within the jurisdiction of the Edinburgh College without its licence. Until the last score of years or so the Dublin College of Physicians actually granted by its Charter to its licentiates the title of "Doctor of Medicine." At the passing of the Medical Act of 1858 it was the custom of the London College of Physicians to address all licentiates as Doctor, and in many old medical works by the most eminent of the profession in London may be seen upon the title-page, after the author's name, "M.D. of the College of Physicians of London." Now it may be readily seen that all this is so merely because it has been for generations the polite custom to style a physician by the courteous title of Doctor, and this title has become a part of the rights and privileges of physicians from ancient usage. It is still more important in these days that all duly qualified physicians should do their utmost to uphold the dignity and status of their several Colleges, when so much of their powers was allowed to lapse by the passing of the Medical Act in 1858, and thereby M.B.'s and M.D.'s were permitted to practise medicine in all parts of Her Majesty's dominions without being first licensed by one of the Colleges of Physicians; and it should be borne in mind that an M.B. or an M.D. in virtue of such degree alone is not legally entitled to call himself a physician any more than an LL.B. or an LL.D. is entitled to call himself a barrister. It is not every barrister who is an LL.D., nor is it every physician who is an M.D. From time immemorial barristers have been called counsel, and from time immemorial physicians have been called doctors; and as it is the custom of Bachelors of Medicine to assume the title and prefix of Doctor (even in the face of by-laws of the Universities specially directed against such a practice), it cannot in common fairness be objected that Licentiates in Medicine should use the same title upon the strength of their being physicians. For the information of Dr. D. C. Black, M.D., whose letter of March 16th I have only just read, I should like to state, as an outsider, that I am not surprised at his two motions submitted to the Faculty of Physicians and Surgeons of Glasgow being rejected by a majority, because, with regard to the first, it was a self-evident fact that Licentiates of the Faculties, being surgeons, are not as such entitled to be styled Doctor; and, with regard to the second, that, two other independent Colleges being concerned, such a motion could not be regarded otherwise than as a gratuitous insult to those two Colleges, whose licentiates would probably deem it a piece of unwarrantable interference upon the part of the Faculty had such a motion been carried. I quite agree with Dr. Black that "if the mere Licentiate of the Faculty is to be permitted to assume the title of 'Doctor' on the strength of a single surgical qualification, what is to prevent the L.R.C.S. Edin., the M.R.C.S. Eng., the L.S.A., and the L.A.H. Dub. from doing the same thing?" But, Sirs, I take it that this is not the real point at issue, and I am humbly of opinion that if the governing body of the Faculty at Glasgow, together with the other medical corporations and medical faculties in the universities, would direct their attention to the putting down of quackery, the detection of bogus M.D.'s and of unqualified and illegal practice of all kinds, so rampant in advertisements particularly, they would earn the admiration of the profession generally, including that numerous body, the physicians, who are doctors but not M.D.'s.

I am, Sirs, yours faithfully,

Ramsgate, April 22nd, 1895. CHARLES COTTON.

P.S.—As a remedy for this complaint, which is extremely chronic, I would like to suggest to all those of the profession who are interested in this matter that they should loyally place as affix to their names the source from which they derive their prefix, as, for example, the M.D. Lond. would appear as Dr. Blank, M.D. Lond.; the M.B. Oxon. as Dr. Blank M.B. Oxon.; the F.R.C.P. Lond. as Dr. Blank, F.R.C.P. Lond.; the L.R.C.P. Edin. as Dr. Blank, L.R.C.P. Edin., and so on. If this were universal, I feel sure that the petty jealousies of angry and disappointed men would no longer be periodically aired in the medical press; that the public would then be able to understand what their medical adviser really was; and that medical titles would become really titles of honour and like the various titles of knighthood, all of which have a common prefix but are vastly different in their sources, as, for example, the ordinary knight bachelors, bannerets, baronets, and those of the well-known orders.

"PROVISION FOR YOUNG IMBECILES."

To the Editors of THE LANCET.

SIRS,—I was very glad to see in your issue of the 30th ult. that Dr. Shuttleworth had drawn attention to the want of proper provision for young imbeciles. The question has been too long neglected. Four years ago, speaking at the North-Western Poor-law Conference, I drew attention to the fact that England will very soon have to take, not a second, but a fifth or sixth place as regards provision for the feeble-minded and epileptic. Four years ago a Bill was brought before the French Parliament, the first clause of

which reads as follows: "Chaque département est tenu d'avoir un établissement médical, destiné à recueiller les idiots et arriérés, à les éduquer et à les doter d'un métier manuel. Plusieurs départements pourront se grouper pour ouvrir cet établissement à frais communs." The Bill has since been amended so as to compel each department to provide two buildings, one for ordinary idiots and the other for epileptic idiots, and with this amendment I thoroughly agree on account of the pernicious effect that the association of epileptic and non-epileptic idiots has upon such cases. The cry has been raised against county councillors who, like myself, advocate proper provision that we are proposing to spend an enormous sum of money for which there would be no return. I believe that those who raise that cry are utterly ignorant of what they are talking about or they would know that the want of proper provision for these cases throws a very heavy burden upon the poor-rate. Returns obtained from the various boards of guardians show that in one year 715 weak-minded women passed through 105 workhouses, and at 56 workhouses it was stated that 366 of these women were leading immoral lives. Anyone who will take the trouble to go through the cases of weak intellect that were noted by the Metropolitan Association for Befriending Young Servants will find case after case where the mothers of illegitimate feeble-minded children are in the asylum or the imbecile wards of the various workhouses—a life-long burden on the ratepayers. It is not only the numbers in the workhouses we have to think about; there are large numbers of these cases at home where it is utterly out of the power of the parents to give them that amount of education which they are capable of receiving. The result is that as years roll on and the parents die these cases come on our asylum books. I am very glad to think that a very large number of the Lancashire boards are in favour of proper provision, and the matter is now under the consideration of the Plans Committee of the Lancashire Asylums Board, and I have little doubt but that practical results will follow.

I am, Sirs, yours truly,

JNO. MILSON RHODES, M.D. Brux.,
Chairman of the Chorlton Board of Guardians.

Didsbury, Manchester, April 20th, 1895.

"DISLOCATION OF THE LOWER JAW DURING AN EPILEPTIC FIT."

To the Editors of THE LANCET.

SIRS,—Mr. C. F. Beadles mentions a case of this kind in THE LANCET of April 20th. Allow me to name another. A woman aged thirty-two, weak-minded, an epileptic since ten, dislocated her jaw in a fit four years ago; it was replaced with some little difficulty. Since then the same accident has occurred frequently, and now it does so once or twice a week. And the patient can and does produce it at will; if she is put out she will put her jaw out, and thus signify her displeasure. She is also able to reduce it herself.

I am, Sirs, yours faithfully,

Hornsey-lane, N., April 22nd, 1895. EDWARD CALTHROP.

"THE WOMEN'S FREE HOSPITAL, SOUTHAMPTON."

To the Editors of THE LANCET.

SIRS,—Our society have no intention of carrying on a newspaper correspondence with the committee of the Women's Hospital, for the truth cannot be elicited in that way. We must, however, mention that the resignations from our society, of which the hospital committee endeavour to make a strong point, were not of "senior members of the society" but simply of four non-resident members. Our society have acted in what they consider to be the public interest in demanding an inquiry. They have brought grave charges against the hospital—namely: (1) That the unusual frequency of operations performed and the number of instances in which operations have been advised though not performed, and now proved to have been unnecessary, taken in conjunction with the admission of the hospital committee that proper consultation has frequently been omitted, give rise to a grave suspicion that some of the operations have been unjustifiable; (2) that the management of the hospital is unsatisfactory; and (3) that the financial arrangements are incompatible with the term "free." And this society would add that the omission of all mention of operation in the death certificates of certain patients who have died after operation is irregular and much to be deprecated.

If the committee of the Women's Hospital believe, as they say, that the action of the Medical Society is the result merely of a mean and despicable professional jealousy, and if, as they further say, the committee of the hospital have nothing to conceal, let them show the courage of their opinions and agree to an inquiry being held by impartial and competent persons. The Medical Society is prepared to justify its position before any such tribunal; but the suggestion that the hospital committee, who are accused of mismanagement, should sit in judgment on themselves is obviously absurd. If the committee of the hospital prefer that the matter should be thrashed out in a court of law, let an action for libel be brought. Our society will defend such an action and plead that the statements they have made are true in substance and in fact. Unfortunately, our society has no power to force an inquiry, but if after this the hospital committee decline it, the medical society and the thinking portion of the public will need no stronger evidence to convince them that there is something to conceal, notwithstanding the statement of the hospital committee to the contrary. The medical society has now discharged its duty to the public and to itself, and declines to have any further correspondence with the hospital authorities, except for the purpose of an inquiry.

We are, Sirs, yours faithfully,

R. D. H. GWILLIM.
NORMAN ALDRIDGE.

April 24th, 1895. Hon. Secs., Southampton Medical Society.

To the Editors of THE LANCET.

SIRS,—With reference to a letter from Dr. Playfair in your issue of April 20th, I beg to say that a reply will be sent at as early a date as possible.

I am, Sirs, yours faithfully,

H. C. PHILLIPS, Hon. Sec.

Clifton-villas, Hill-lane, Southampton, April 24th, 1895.

PUBLIC AND PRIVATE VACCINATION.

To the Editors of THE LANCET.

SIRS,—As a public vaccinator I must protest against the doctrine of voluntary vaccination as put forward by a correspondent in your last issue. The fault lies in the law and not in the operation or operator—i.e., while it is compulsory on the part of public vaccinators to put from three to four or more vesicles on the arm the private practitioner revels in uncontrolled liberty, and virtually does as his patient bids him. I know a public vaccinator who puts on the regulation quartette in his official capacity, and actually stops at two where the mother backs her request or command with half-a-crown. Surely the law is faulty here, and the less said about the operator the better. The medical conscience is as elastic as the general conscience, and it never more required a tonic of the moral kind than in the present day.

I am, Sirs, yours faithfully,

April 23rd, 1895. PUBLIC VACCINATOR.

LIFE ASSURANCE SOCIETIES.

To the Editors of THE LANCET.

SIRS,—I enclose copy of a letter received by me from an insurance agent in the neighbourhood. If his statement as to other medical men is true, which I doubt, it is evident that the medical profession has only itself to blame for its diminishing income. The only reason for thus sharing the fee is the hope of taking these cases from a brother practitioner; and this almost dishonest sharing is therefore a dead loss to the profession at large. I sent the letter to the head office, and received an answer expressing astonishment and repudiating and condemning any such arrangement.

I am, Sirs, your obedient servant,

DEVONIAN.

April 5th, 1895.

DEAR SIR,—In the event of my getting any life assurance proposals in your district, would you be willing to do as other medical men—allow me half your fee for examination? The fees are, as you know, 10*s.* 6*d.* for £100. Hence, if any one insured for £100 the fee would be 10*s.* 6*d.* Would you take 5*s.* 3*d.* and allow me the other 5*s.* 3*d.*? I enclose stamped and addressed envelope for your reply.—I remain,

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

The Effect of a Dream.

LOVERS of the marvellous have the opportunity of finding a strange coincidence in a story recently told at the coroner's court here. A girl aged thirteen disappeared from her home; her disposition was taciturn and sulky, which, coupled with her expressed apprehension of water, led to the worst fears being entertained by her parents. Her body was subsequently found in the canal. The aunt of the deceased, hearing that the girl was missing, dreamt that she was walking along the bank of the canal, and while looking into the water saw the face of her niece. The police were asked to drag the canal at the spot indicated in the dream; they did so, and at once found the body. Such was the simple story told at the inquest, a statement which if made in a novel would be ascribed to the powers of the writer's imagination.

Death of Mr. John Baines.

At the age of seventy-six this well-known figure in the local medical profession passed away on the 20th inst. Mr. Baines was essentially a type of the old school. Disdaining the aid of horses he daily walked his round for many years. His advice was held in high esteem by a large number of the poor, by whom he was considered a high authority, particularly in cases of midwifery. His habit was to wear a full coat with pockets arranged all round, containing midwifery forceps, bottles, and a number of useful things, not the least important of which was a gimlet which he was wont to stick into a convenient place to hang up his coat. In some of the poorer tenements he visited this precaution was one which commended itself, and in many ways proved of value. His genial form and kindly manner will be missed among a considerable number of the working class in the town.

Female Slavery.

The periodical discussion about the long hours of shop assistants has lately been revived. The tendency of things to find their level by the ordinary action of supply and demand appears to be unequal to the solution in this instance. Too many female shop assistants and not enough servant girls—this is the main cry. Some are disposed to add to the category of ills of these two classes the grievances of nurses and teachers. With some show of reason it is argued that nurses who have to walk long distances to attend to their patients necessarily arrive in a tired and often jaded condition, in which their services cannot be adequately rendered. No doubt under these circumstances the patients suffer. The remedy could well be applied by limiting the area of their duties, which would mean an increase in the number of nurses in any given district. Occupation, and efficiency in the work done would be the outcome of a laudable policy, which would result in a greater good to a greater number.

Saltley Sewage Farm.

The work of the Tame and Rea District Drainage Board, which comprises in its area the disposal of the sewage of Birmingham and adjacent districts, is of an extensive and interesting nature. The board carries on an extensive market gardening business, as well as that of stock-breeding and feeding, milk selling, and fruit growing. The farm consists of 1300 acres, of which 800 are irrigated by gravitation, 247 are occupied by roads, buildings, works, &c., and fifty-three are of turf for grazing &c. The labour on the sewage farm costs about £6 per acre. Various details connected with the produce and its value have been set forth in an interesting manner, which affords matter for comparison of agricultural items, and will repay perusal. The total amount of loans negotiated on account of the farm is £426,115 and the whole of that amount has been expended. The sum contributed by the rates is about £34,000 per annum. The average loss on the farm accounts for the last seven years has been £2688 per annum, many reasons of a satisfactory kind being adduced to account for this deficit. It is stated that the area of the farm is to be increased soon by 180 acres, arrangements for the purchase being already made. An undertaking of such magnitude possesses an interest for the ratepayers, and affords ground for reflection in times of depression in trade and agricultural competition.

April 23rd.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Death of the Rev. Canon Whitley, D.D.

ON Monday last, at the vicarage of Bedlington in Northumberland, died the Rev. Canon Whitley at the ripe age of eighty-seven years. There was no better known or more universally beloved clergyman in the north of England than the deceased canon. Senior wrangler in 1830, he came to Durham in the year 1833 and was intimately connected with the University from that time till 1855. In 1854 he became vicar of Bedlington. At the death of Dr. Headlam, the first President of the College of Medicine at Newcastle-upon-Tyne, Dr. Whitley, then an honorary canon of Durham, was unanimously elected President, and continued in office from 1864 till the year 1872, when he was succeeded by the late Dr. E. Charlton. At Bedlington Dr. Whitley was identified with every public movement. For many years he presided at the Bedlington Petty Sessional Court and at the local board. Last year he laid the foundation stone of the local waterworks, when he was presented with a silver trowel by Mr. J. Trotter, who finished his remarks with the following words: "In short, the name of Canon Whitley was a household word in every house in the district, and was synonymous with all that was good, just, and benevolent." Few of the men with whom the Canon was intimate remain, but his old friend and colleague, Dr. Dennis Embleton, is still in Newcastle, the Nestor of his profession. Canon Whitley might have been with us yet but for an unfortunate accident. A few weeks ago he fell whilst alighting from his carriage, and the shock so upset him that he died.

Dental Hospital for Newcastle-upon-Tyne.

In these days of special hospitals it is strange that a city of the size of Newcastle should be without a dental hospital. It is mainly due to the energy of Mr. Markham, a leading dentist in Newcastle, that yesterday the Right Worshipful the Mayor opened, in a prominent thoroughfare, a dental hospital for the town and district. The movement has been well supported by the dentists, and there can be no doubt that the hospital will be a great success and a boon to the poor of the neighbourhood.

Illegal Sale of Chlorodyne.

At the Newcastle-upon-Tyne county court a few days ago a druggist's assistant was prosecuted by the Pharmaceutical Society for selling chlorodyne. The defence was that the assistant thought the drug was a patent medicine. A fine of £5 was inflicted by Judge Greenwell, and his honour remarked, "An apprentice is absolutely prohibited from selling poisons." Considerable importance must be attached to this action of an apprentice by the Pharmaceutical Society, as a barrister was sent from London to conduct the case.

Newcastle-upon-Tyne, April 23rd.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Edinburgh University General Council.

THE statutory half-yearly meeting of this body was held last week, and as there was no business of outstanding importance there was a small attendance. Sir William Muir presided. The report by the committee on ordinances was submitted, and dealt with the ordinances issued since last meeting of the council. The ordinance dealing with the powers of the chairman of the general council had been modified in the direction recommended by the council. Approval was expressed of a new ordinance repealing a section of a previous one in which it was provided that "no person shall be appointed an examiner who is not a member of the general council of one or other of the Scottish Universities." The report of the finance committee was then submitted, which shows that last year there was a surplus of £4500. It states that "the expenditure continues to show a tendency to increase, as is obviously necessary if the University is to maintain its high standard of efficiency in competition with other academic institutions. In particular the staff of lecturers has been and is being considerably increased. It is perhaps not strictly within the province of the committee to

criticise the *personnel* of the appointments which have in some cases been made to lectureships, but they desire to say that the method frequently adopted of appointing a professor's assistant to lecture upon a subject cognate to the chair is not calculated to achieve that independence of thought and action which is needed for the higher and specialised branches of knowledge." The total number of students in medicine was last year 1560 against 1951 in 1891–2 and 1736 in 1892–3.

Unusually High Death-rate in Edinburgh.

During the month of March the total number of deaths was 820, making a death-rate of 35·97 per 1000. From 1890 to 1894 the death-rate varied from 15 or 16 to over 20 per 1000 during the corresponding month. The deaths from diseases of the chest were 438 and from zymotic diseases 111. The zymotic cases included 85 from measles, 6 from scarlet-fever, and 4 from small-pox.

Graduation Ceremony at Edinburgh University.

The spring graduation ceremony took place last week, the ceremony at this time being mainly for the conferring of honorary degrees and degrees in arts. Professor Seth delivered the address and dwelt upon the changes in the arts curriculum brought about by the Universities Commission.

Memorial to Dr. Peter Lowe.

A tablet to the memory of Dr. Peter Lowe, the founder of the Faculty of Physicians and Surgeons of Glasgow, has recently been erected in the nave of the Cathedral as the result of a movement on the part of the council of the Faculty. Dr. Lowe was buried in the Cathedral churchyard, one of the prominent features in which is a quaint and curiously carved monument erected over his grave. This monument bears the date 1612, and it is its somewhat time-worn condition that has suggested the necessity for another memorial. This has taken the form of a magnificent bronze tablet set in a marble slab; it bears in relief a number of figures, the principal one symbolising the spirit of healing. Underneath is the inscription copied from the old tomb. The ceremony of unveiling was performed by Dr. Bruce Goff, the President of the Faculty, in the presence of a number of the leading practitioners from Glasgow and the neighbourhood.

Graduation Ceremony at the Glasgow University.

The spring graduation ceremony took place on the 17th inst. As is usual at this time of the year the great majority of the graduates came from the Arts and Divinity Faculties. Six gentlemen, however, received the degree of M.D., one of these, Dr. P. H. Abercrombie of London, being awarded commendation for his thesis on Turbinotomy in Nasal Stenosis: analysis and notes of sixty-six cases. Amongst those who received the honorary degree of LL.D. were Professor Thorpe, F.R.S., chemist to the Inland Revenue Department, Somerset House, and Dr. Laurence Waddell, I.M.S. The last mentioned is a graduate in medicine of the University, and during his residence in India has distinguished himself by his studies of natural history and of the native religions. One specially interesting feature of the ceremony was the "capping" of two ladies, each of whom received the M.A. degree. These are the first ladies who have taken the arts degree in the University of Glasgow. Medicine has here been beforehand, the Queen Margaret College of the University having provided four medical graduates in 1894.

The Medical Schools, Glasgow.

The summer session at the University and the extra-mural schools commenced on the 22nd inst. At Anderson's College several changes in the teaching staff have taken place. Dr. T. K. Dalziel (who has previously lectured on forensic medicine) has been appointed lecturer on Surgery in the place of Dr. James Dunlop, resigned. The vacancy thus created in Forensic Medicine has been filled by the appointment of Dr. R. M. Buchanan. Dr. Erskine takes the place of Dr. Barr (transferred to the University) as lecturer on Diseases of the Ear; and Dr. Pearson Munro becomes lecturer on Public Health.

Presentation to Dr. T. K. Dalziel.

The members of the Glasgow Police Force have presented Dr. T. K. Dalziel with a handsome hall clock bearing a suitable inscription on the occasion of his retirement from the post of casualty surgeon to the central police division. Dr. Dalziel has held this position for ten years, and one of his duties has been the instruction of the police in ambulance work. The presentation was made by Superintendent Orr.

Clinical Demonstrations for Practitioners.

The members of the Glasgow Southern Medical Society, on the invitation of Dr. Middleton, substituted for their usual evening meeting on the 11th inst. a clinical demonstration in the Royal Infirmary. Dr. Middleton showed a number of patients, charts, microscopic specimens, &c., and in the course of his remarks expressed the opinion that it would be a great advantage to many members of the profession and would considerably extend the usefulness of the hospitals if some arrangement were made by which the practitioners of the city could have an opportunity of systematic attendance on clinical work in the infirmaries. He thought this could only be done satisfactorily by appointing a certain hour, say one day a week, when the physician in charge of the wards would attend and give demonstrations specially for practitioners; qualified medical men could not be expected to attend at the ordinary clinical instruction of medical students, and moreover, elementary teaching was not what was required. If his suggestion was adopted they would have something in the shape of a permanent post-graduate clinical course. On the motion of Dr. John Brown, the President of the society, a cordial vote of thanks was passed to Dr. Middleton for his instructive and interesting demonstration, and the members generally expressed warm approval of his proposal to increase the facilities for post-graduate clinical work.

Glasgow: Women Candidates for the Triple Qualification.

As showing the increasing popularity of medicine as a career for women, the number of women amongst the successful candidates at the April examinations for the Triple Qualification is somewhat striking. In the Final Examination of 44 successful candidates 6 were women; in the Third Examination the women numbered 6 out of 11 successes; in the Second 6 women passed and 22 men; and in the First the numbers were 5 women and 7 men.

The Royal Infirmary, Dundee.

About the end of the present year the Dundee Royal Infirmary will be in possession of a new operating theatre, designed according to modern requirements and embodying all the most recent suggestions and improvements. It will be a spacious, well-lighted room, provided with seats for forty students; the floor will be made of Taratza and will measure thirty feet by twenty-five; the walls will be covered with smooth tiles. Ample provision has been made for the admission of light; there will be a large circular skylight in the roof, a very wide bow-window on the north side, and a smaller window on the west side. Between the wards and the theatre is the anæsthetic room, the communication of which with the theatre is closed by an iron folding door. The washing basins are of glass and their waste-pipes discharge outside into the open air. Arrangements will be made for promptly washing every part of the interior of the theatre with a hose-pipe. There is a special room for the sterilising of instruments and dressings. Both gas and electric light are provided, and warmth is supplied by steam pipes and radiators. The estimated cost of the new structure is £1500.

April 23rd.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Treatment of Hydrophobia.

AT a meeting of the Armagh board of guardians, held on April 16th, a resolution was carried unanimously that as, owing to the absence in Ireland of any Pasteur institution for the treatment of hydrophobia, patients have now to be sent to Paris at large expense and often at great personal inconvenience, the time has come when a Pasteur Institute should be established in Dublin, and that the Local Government Board be requested to take such steps as may be necessary to meet so grave a public requirement.

Omagh District Lunatic Asylum.

At the last monthly meeting of the governors of this asylum it was decided to increase the salary of the assistant resident medical superintendent, Mr. West, to £215 per annum.

North of Ireland Branch of the British Medical Association.

The spring meeting of the above society was held in

Belfast on April 18th and was largely attended. Dr. Lindsay introduced a discussion on Pneumonia, dealing with a variety of its features, as bacteriology, etiology, temperature, diagnosis, treatment, &c.; and Professor Whitla, Dr. Thompson (Omagh), Dr. Calwell, Dr. Bingham, Dr. Boyd, and Dr. Dempsey also spoke. Professor Byers then read a paper on Recent Views as to the Management of Labour, in which, amongst other matters, he dwelt fully on the great importance of abdominal palpation in the conduct of labour, a method which gave more information than vaginal examination to the medical attendant, and was safer for, and less objectionable to, the patient herself. In the discussion which followed Dr. Fraser, Dr. Kevin, Dr. Darling (Lurgan), and Dr. Dempsey took part. Dr. Howard Sinclair showed a case of Spastic Paralysis in a child; Dr. Darling, a huge Fibroma of the Ovary; and Professor Byers, the specimens (Cystic Ovaries, Papilloma of Fallopian Tube and Broad Ligament, and portion of Enlarged Uterus) removed in a case of double ovariotomy and hysterectomy. It was decided that in future the meetings of the North of Ireland Branch shall be held at twelve o'clock, as at this time country members will be better able to attend.

Downpatrick Water-supply.

At the meeting of the Downpatrick board of guardians held on April 20th a declaration in reference to the present state of the storage reservoir at Tanaghmore was received from Dr. Heron and Mr. Maguire, two of the members of the Ratepayers' Protection Committee, and was ordered to be inserted on the minutes. Among other matters they say the greater part of the reservoir bottom consists of soft peat bog without any firm skin or upper layer on it; and that portions of the surface appear to have been loosely sprinkled with stones forming a single thin layer wholly insufficient as a covering for the bog to keep the water from contact with it and consequent pollution. The water that remained in the reservoir they found exceedingly foul and exhibiting a scum on the surface, and showing evidence of contact with boggy material.

The Ambulance Waggons.

In 1892 one of the Belfast merchant princes, Mr. Allen, of Stormount Castle, presented a fully-equipped ambulance to the city. This was on Aug. 2nd, 1892 and during the remainder of that year it was called upon 16 times. In 1893 there were 45 calls; in 1894, 392 calls; and up to the present date of the current year, 191 calls; in all, 644 sufferers have been relieved since Mr. Allen's gift. The expense of the horsing and the working of the waggon has been met by the Police Committee of the City Corporation, who gave it in charge to the Fire Brigade. Mr. Parker (the superintendent of the Fire Brigade), himself an enthusiast in ambulance work, and his men, who have been trained in ambulance work by Dr. H. L. McKisack, have undertaken this duty, and are doing it most admirably. It became evident to the city coroner, Mr. Finnegan, that a second ambulance would be needed, and he brought the matter before the local committee of the St. John Ambulance Association, who cordially approved of the scheme, and appointed a subcommittee to carry out the project. The coroner raised the necessary funds for the purchase of the new waggon, which on April 20th was named "Londonderry" by the Marchioness of Londonderry. In doing so she said she was herself the proud possessor of the certificate of the St. John Ambulance Association. She trusted the waggon would be the means of relieving a great deal of suffering in the future. The ambulance vehicle is the largest pneumatic-tyred in the world. The body of the carriage has been made lofty to obtain the very best ventilation. It will carry two patients, with one, two, or three attendants. The springs are specially made to prevent vibration, and the wheels are rubber-tyred so as to minimise noise. The wood work is of ash panelled with walnut and highly varnished, so that it can be washed and disinfected if necessary. There is a folding step to work with the doors as they open or shut. Altogether, it is a most perfect machine of its kind.

The Mountstewart Boating Accident.

Nothing further has transpired in reference to the sad boating accident to Lord Londonderry's servants at Strangford Lough, County Down. It is said that an oar and a luncheon basket have been found, but no clue whatever has been discovered as to the bodies, and the report that the boat has been found is not correct. There is an extremely strong current at the mouth of the Lough, running at the rate of ten miles an hour between Portaferry and Strangford, and it is feared that the bodies may have been carried out to sea by the tide.

The Cork Mercy Hospital.

The annual report of the Mercy Hospital has been issued by the board of governors. It points out that the hospital has been enlarged by the addition of two private houses adjoining it. The number of surgical and medical extern patients has diminished somewhat owing, it is suggested, to a change in the hours of attendance; but a large increase has taken place in the department for diseases of the eye, ear, and throat, the numbers recorded for that special branch being 14 453 externs last year and 11,432 the previous year, and 134 operations this year and 22 the previous year. The balance-sheet showed that the hospital is in a healthier condition financially than it had been some previous years. An anonymous correspondent writing to one of the daily papers directs attention to the above figures, and makes the modest proposition that part of the funds specially collected for the Opbthalmic Hospital should be handed over for the benefit of the Mercy Hospital.

A Strange Case of Attempted Suicide.

A gentleman holding a very important Government appointment endeavoured to commit suicide in a wood near Crosshaven under very sad circumstances. Owing to his mental condition having caused grave anxiety to his relatives special precautions were taken for his protection; but he managed to elude the vigilance of his attendant, and when discovered it was found that he had cut his throat with a razor and inflicted frightful wounds on his face and left forearm. It was afterwards ascertained that prior to leaving his residence he had tied his hands together, and the wound on his left forearm was probably inflicted in the endeavour to set himself free. From a psychological point of view it would be interesting to analyse the train of thought that passed through the unfortunate patient's brain prior to his having tied his hands. Did he feel that he was being goaded on to suicide by an irresistible impulse, and whilst reason was still comparatively dominant did he take such precautions as he could devise for his safety; or, on the other hand, which is perhaps less likely, was he anxious to save his relatives from the stigma attaching to suicide, and did he endeavour to make the case appear to be one, not of self-destruction, but of murder? The desire to save the feelings of relatives was singularly exemplified some years ago by the action of a distinguished gentleman who committed suicide and had left beside him a slip of paper on which was inscribed the one word "Mad."

Rabies in Cork.

Rabies is causing a good deal of concern to some of the boards of guardians in the county of Cork, as, apart from any other consideration, the amount of expenditure involved is becoming considerable. If the guardians order the destruction of animals bitten by a rabid dog they are obliged to recompense the owners; but the principal expense is incurred in sending to Paris any of the poorer classes who may have been bitten by rabid dogs. The usual custom is to have the patient accompanied by a relieving officer, and travelling expenses, together with the cost of maintenance, come to a considerable sum.

The Local Government Board sent a communication to the Bansha Dispensary Committee informing them that Dr. Browne, medical inspector, had reported that on visiting Bansha Dispensary he found the medical officer in a most excited state and evidently suffering from mental aberration. The inspector recommended that the medical officer be relieved from duty, and the committee at once acted on the suggestion.

April 23rd.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Influenza followed by Infection with Bacillus Coli.

DR. SIREDEY[1] had recently under his care a man aged twenty-nine who, admitted into hospital on the fifteenth day of a well-marked attack of influenza, with slight congestion of the lungs and very limited effusion into the left pleural cavity, had besides a temperature oscillating around 40° C. (104° F.), and also intense albuminuria and symptoms of

[1] Société Médicale des Hôpitaux, April 19th, 1895.

serious general infection of the system. Despite the absence of typhoid stools, the onset of coma on the third day after admission led to puncture of the spleen for diagnostic purposes. The product of the puncture yielded no trace of Eberth's bacillus, but there was discovered the bacillus coli, which was also found in the urine and in the blood of the lungs. The man died with uræmic symptoms. The necropsy failed to bring to light any typhoid lesions. The left kidney was the seat of intense inflammation, there being present also a voluminous white infarct. This case reminds one of the forms of infective nephritis studied by Vidal, and which were characterised by typhoid symptoms. It is probable that many infective diseases besides influenza end fatally on account of the onslaughts of this mischievous germ on enfeebled tissues.

Microbes and Wood Pavement.

The grave charge has been formulated against wood pavement of constituting a favourable nidus for the cultivation of germs; indeed, the theory has been advanced that the serious epidemic of influenza that visited this capital in 1889-90 owed its inception to this cause M. Miquel now comes forward to reassure us on this head by proving experimentally that wood paving is not so deleterious to public health as has been represented. A décigramme of sawdust is collected from the bottom of a hole bored into the wood pavement by means of a drill sterilised in a flame and then allowed to cool, the sawdust is diluted with 100 c.c. of sterilised water, and the mixture is sown on nutritive gelatine. The number of colonies is counted at the end of thirty days of culture at a temperature of 20° to 22° C. Newly laid pavement composed of pine blocks yields a dust at a depth of 3 centimetres which gives 650 germs per gramme of dust, or rather less than one per milligramme. Pavement laid six, eight, or nine years ago was likewise examined, care being in this case taken to remove by previous scraping to a depth of 1 or 2 millimetres the superficial crust developed by the traffic. In the pavement of the Faubourg St. Honoré, composed of Landes pine and laid in 1887, 1 gramme of sawdust at the surface produced 1,400,000 bacteria. At a depth of 5 centimetres this number had diminished to 4200. In pitch-pine pavement laid in 1889 in the Rue St. Lazare and the Rue de Rome the superficial sawdust yielded per gramme 1,004,000 bacteria, whereas at a depth of 2 centimetres only 500 were found. In the same way the Rue Marbeuf pavement, laid in 1886, gave at the surface 1,365,000 germs per gramme, and 4200 and 3100 at depths of 2 and 5 centimetres respectively. This goes to prove that wood pavement does not allow any penetration of germs, which remain adherent to the superficial layers. Paris mud, dried at a temperature of 30° to 35° C. yields an average per gramme of pulverised mud of from 40 to 50 million bacteria.

Antistreptococcic Serum.

Inquiries having been addressed from England to Messrs. Roberts and Co., the well-known chemists of the Rue de la Paix, regarding the possibility of procuring a supply of this product, the matter was referred to me. I at once wrote to Dr. Roger, a translation of whose courteous reply I append for the information of your readers:—

"4, rue Perrault.

"DEAR FRIEND,—Hearty thanks for the note which you addressed to THE LANCET, and I am very glad to learn that English medical men have taken an interest in my modest researches. Until now I have vaccinated only two horses, these providing me with quite an insufficient amount of serum; the animals are bled every fortnight or twenty days, and at present I furnish those medical men with serum who require it. But, as you see, no practical solution presents itself. It would be well if some druggist prepared it, but a perfectly reliable man would be necessary. Meanwhile I distribute serum whenever I have it, and I keep a little for the purpose of continuing my researches. With best thanks and sincere regards,—Yours,

"April 23rd. ROGER."

ROME.

(FROM OUR OWN CORRESPONDENT.)

Cerebro-spinal Meningitis.

SOMETHING like a panic pervaded the arsenal of Spezia from the comparatively sudden and widely diffused malaise of a clearly infective character that recently visited the *personnel*, naval and military. It was at its worst in the Vivera barracks and on board the *Italia*, and before the medical authorities had time to report upon it a clamour arose in the lay press as to the remissness of the hygiene and the general incompetence of the sanitary and clinical service. Official inquiry has promptly put an end to these charges. There has been neither individual remissness nor general incompetence. The "malaise" in question has turned out to be cerebro-spinal meningitis, a too familiar scourge of the armies and navies of all countries, and its prevalence as well as gravity has been reduced, or rather dwarfed, to quite inconsiderable proportions. Of the combatant force it seems only six were attacked, three of them belonging to the crew of the *Italia* and three to the 93rd Regiment of Infantry quartered in the Vivera barracks. The non-combatant cases were really *une quantité négligeable*. There have been no deaths, and the result of the inquiry has been to confirm once more the established induction that cerebro-spinal meningitis is an infective malady which, *par excellence*, runs an epidemic course from December to June, and is most formidable in the spring; that it is favoured by the assemblage of individuals *en masse*, as in garrisons and on board ship; and that among these it selects the younger recruits, particularly after severe drill or work. Another finding of the official inquiry has been that the *Italia* more than maintains the character of the magnificent Italian ironclads for hygienic efficiency, and that the Vivera barracks have a quite satisfactory record from a sanitary point of view. I may add that the attempt to prove that the epidemic had been propagated to the civilian population broke down completely, after the special report counter-signed by the Syndic of Spezia, Signor Paita, member of the Chamber of Deputies.

Argon.

One of our ablest physicists, Dr. Massimo Tortelli, has just delivered a lecture, before the Circolo dei Naturalisti, on "Argon e la Chimica dell' Atmosfera," argon being the new atmospheric gas discovered not more than three months ago. Cavendish, he showed, had, before his death in 1810, succeeded in isolating, but not in identifying, this body, owing doubtless to the imperfect means of analysis available at that time. Chemical science, indeed, is full of such partial anticipations—Avogadro's hypothesis, for example, having been so far in advance of his contemporaries that it had fallen into oblivion until, with the discovery of new facts, it was resuscitated and put on a really scientific basis by the present occupant of the Chair of Chemistry in the Roman University, Professor Stanislas Cannizzaro. Dr. Tortelli's lecture, full of incidental matter peculiarly interesting to the medical climatologist, is one of a series which evokes the greatest interest in the profession. The lecture announced for the week following is on the much-debated theme "Il Lavoro Utile dei Microbi nella Società," and will be delivered by Dr. Giuseppe Sanarelli, Professor of Hygiene in the University of Siena.

The Health of the Pope.

The Holy Father, in spite of the fatigues inseparable from Easter-tide, is in good health and eager to get out of doors. Since December last he has not once descended to his favourite Vatican Gardens, where, besides enjoying the incomparable amenity of the walks and parterres and shady tufts and fountains, he always interests himself in watching the cultivators at work and in questioning them as to their progress. The Commendatore Dr. Lapponi, however, has postponed this open-air exercise till the weather has become steadier and warmer, the snow still lingering on the Apennines and acting as a refrigerator over all Central Italy.

Dr. Baccelli.

The general elections are imminent, and a strong committee has been for some time at work to secure the return of the Minister of Public Instruction, Dr. Guido Baccelli, who sits for the third division of Rome. There is no doubt of his coming in at the top of the poll, his popularity as a citizen being hardly second to his prestige as a Minister and his distinction as a clinical teacher and consultant.

Professor Karl Posner.

Among the eminent *forestieri* now with us the Professor of Internal Medicine in the University of Berlin has been cordially welcomed at the Accademia Medica di Roma. He has already seen much of our clinical work under the congenial auspices of the President of the Accademia, Dr. Baccelli.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

The Antitoxin Treatment in Austria and Hungary.

EVER since that memorable meeting of the Vienna Medical Society when Professor Wiederhofer entered the lists against Professor Kassowitz the question of serum treatment has been the order of the day. The medical journals publish articles on both sides, and sometimes new remedies are proposed for diphtheria, hydrogen peroxide for instance. In a report presented at a meeting of the Hungarian Medical Society Professor Purjesz (Klausenburg) accused Dr. Behring of having over-hastily published his remedy, and Dr. Alföldi related a case where the prophylactic injection of antitoxin (100 normal units) had caused fatal nephritis in a girl three years old. On the other hand, Dr. Vucetic (*Vienna Medical Journal*) notes the following effects of antitoxin: (1) it has an advantageous influence, and this influence may be accelerated by early injection; (2) the false membranes are more easily loosened; (3) the unfavourable effects for the greater part are dependent upon idiosyncrasy; and (4) the antitoxin treatment is a temporary prophylactic against diphtheria. But between the eulogists and the opponents of antitoxin stand those who follow the old principle: *Medio tutissimus ibis.*

Disintegration of Bodies after Interment.

A lecture on the above subject was recently delivered by Dr. Kratter, Professor of Forensic Medicine at Gratz, at a meeting of the society called "Flame," which advocates the practice of cremation in Austria. The series of changes begins with the distribution of the blood. When the blood is no longer propelled by the action of the heart it sinks to the dependent parts of the body, following the law of gravitation. The vessels soon become unable to resist the blood pressure, and the consequence is that the blood and the fluids of the tissues become extravasated, elevating the epidermis in blisters, which burst and allow all the fluid to escape. This process takes two months. From the complex molecules composing the human body more simple combinations are gradually formed, and in an early stage the albuminates give rise to ptomaines, products resembling vegetable poisons. What we term cadaveric poisoning is not caused by the above-mentioned substances, but by living organisms. Many insects, especially flies, assist in the decomposition of the corpse. When one genus of these perishes a second arrives to continue the work of destruction. First come the muscle destroyers, then the fat destroyers, and finally those that form humus. The soft parts of a full-grown body are decomposed within two years, a space of time which may be prolonged by want of some conditions, such as warmth, moisture, and the access of air. The fluids of the corpse generally suffice to start the decomposition; if they are deficient the bodies turn to mummies, such as have been found in some graves of Germany and Piedmont, whereas abundance of moisture produces adipocere. Seeing that the same oxidation products (CO_2, HNO_3, H_2SO_4) occur in the last stage of decomposition as in combustion these processes are to be considered as ultimately identical.

Dermatological Society and Congress.

At the last meeting of this society Dr. Nobel, assistant to Professor Lang, exhibited three cases of Lupus which had been treated by excision and transplantation, the diseased tissues having been removed by dissecting off the entire floor of the ulcers. The wounds healed and the scars resulting from them were not very perceptible. In consequence of these gratifying results Professor Neumann recommended the radical treatment, except in the case of lupus on the ala nasi, where skin grafting and cauterising were more successful. The general secretary of the congress to be held under the auspices of the German Dermatological Society at Gratz on Sept. 23rd, 24th, and 25th has announced that there are two subjects to which special attention will be directed: (1) Pemphigus, introduced by Kaposi (Vienna) and Rosenthal (Berlin); and (2) Syphilis, introduced by Neisser (Breslau) and Caspary (Königsberg).

Echinococcous Cyst of the Omentum.

Dr. Frank at a recent meeting of the Vienna Medical Society exhibited an echinococcous cyst remarkable by reason of its position. The patient, a woman twenty-six years of age, suffered from a tense fluctuating tumour, which could be felt above the symphysis pubis, and was supposed to be cyst-ovarian. The cyst was removed by laparotomy and was found to be of an ovoid form, measuring in its long diameter 17 centimetres (=6¾ inches) and in its transverse diameter 13 centimetres (=5¼ inches). It contained a turbid yellow fluid, the sediment of which consisted of scolices in a state of fatty degeneration, whereas the wall of the cyst was covered with numerous sterile secondary vesicles. In 1892 Professor Albert exhibited a similar case, and the late Professor Billroth explained that cysts of the omentum owed their origin to the bursting of an echinococcus of the liver. In this case no implication of the liver was observed during the operation.

April 22nd.

Medical News.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed the First Examination of the Board in the subjects indicated under the "five" years' regulations, viz.:

Part I., Chemistry and Physics:—

Archer, John Alfred, Mason College, Birmingham.
Ashmore, Arthur, Yorkshire College, Leeds.
Barron, Robert Macpherson, Guy's Hospital.
Blatchford, William Nichols, University College, Bristol.
Bradbury, John Cecil Openshaw, Cambridge University.
Brownrigg, Joseph, University College, Liverpool.
Burgess, Percy Charles, Middlesex Hospital.
Carlyon, Arthur Farrington, Middlesex Hospital.
Carr, Henry Brookes, Guy's Hospital.
Charlton, John Fitzgerald, Charing-cross Hospital.
Cook, Lewis, Westminster Hospital.
Cope, Gilbert Edgar, Westminster Hospital.
Daly, Frederick James Purcell, London Hospital.
Driscoll, Louis Cornelius, Charing-cross Hospital.
Dyer, Walter Percy, St. Bartholomew's Hospital.
Gee, Claude Alfred Heath, University College, Bristol.
Harris, Robert James, St. Thomas's Hospital.
Hayes, Arthur Herbert, St. Bartholomew's Hospital.
Hodgson, Robert Edward, St. Mary's Hospital.
Humphreys, Jack Edmund, Charing-cross Hospital.
Johnson, William, Guy's Hospital.
Kirkconnel, Edward Birchall, Owens College, Manchester.
Lamborn, William Alfred, Middlesex Hospital.
Longbotham, Jonathan Harry, Yorkshire College, Leeds.
May, Harry John, London Hospital.
Nunn, John Wilfred, St. Bartholomew's Hospital.
Palmer, William Grimes, Cambridge University and Guy's Hospital.
Perks, Alfred, Guy's Hospital.
Pritchett, George William Morris, University College, London.
Purkis, Dennis Woodley, St. Bartholomew's Hospital.
Rickard, Cecil Rodney, Middlesex Hospital.
Sanders, James Herbert, London Hospital.
Sells, Charles Bernard, Guy's Hospital.
Shoosmith, Louis Stephen, St. Mary's Hospital.
Speers, William Gordon, St. Mary's Hospital.
Stevens, Stanley, St. Bartholomew's Hospital.
Stratford, Howard Blenheim Martin, Oxford University.
Thomas, Harold Sebert, St. Bartholomew's Hospital.
Thwaites, Henry, London Hospital.
Tongue, George Preston, St. Paul's School, West Kensington.
Ward, Percy Harold, Guy's Hospital.
Wood, Charles Herbert, University College, London.
Wright, Thomas James, Guy's Hospital.

Part II., Practical Pharmacy:—

Allen, Walter Francis, London Hospital.
Bryan, Clement Arthur Douglas, Guy's Hospital.
Dean, Percival Bruce, St. Mary's Hospital.
Edinger, Frederick Kincard, University College, London.
Francis, William Vare Chalmer, Westminster Hospital.
Griffith, John Richard, London Hospital.
Holmes, Willmot, St. Mary's Hospital.
Oxley, James Charles Stewart, St. Thomas's Hospital.
Pocock, Arthur Robert George, University College, London.
Sherren, James, London Hospital.
Williams, Eric Wadlow, St. Mary's Hospital.

Part III., Elementary Biology:—

Asten, Walter, Mason College, Birmingham.
Atkinson, George James Smith, St. Paul's School, West Kensington.
Bagshawe, Herbert Vale, Guy's Hospital.
Baker, Dodington George Richard S., University College, London.
Baker, William Lincoln, St. Mary's Hospital.
Barlow, Edward Hovenden, Guy's Hospital.
Bartlett, Ernest John Reeve, King's College, London.
Bartlett, Basil Sorley, University College, London.
Beard, Joseph, Firth College, Sheffield.
Bell, John Cunningham, University College, London.
Bennett, William Frederick C., Firth College, Sheffield.
Betts, Alfred John Vernon, Westminster Hospital.
Bigg, Reginald, St. Bartholomew's Hospital.
Black, Guy, St. Thomas's Hospital.
Blake, Percy Ryall, London Hospital.
Bodman, Christopher Osmond, University College, Bristol.
Boursot, Basil John, St. Bartholomew's Hospital.

Brown, Thomas Walker Stanley, Guy's Hospital.
Brown, Thomas Warren, St. Bartholomew's Hospital.
Butler, Harold Branson, St. Bartholomew's Hospital.
Carter, Robert Markham, St. George's Hospital.
Cathcart, George Eliott, St. Bartholomew's Hospital.
Causton, Albert Edward, Guy's Hospital.
Clarke, Edward Murray, University College, Cardiff.
Cocke, Robert Sturgeon, King's College, London.
Compton, Maurice Winzar, St. Thomas's Hospital.
Compton, Spencer Langley, University College, Bristol.
Cook, Lewis, Westminster Hospital.
Cooke, Reginald Torriano, St. Bartholomew's Hospital.
Cooper, Walter Edward, University College, London.
Corbett, Sidney D'Alton, St. George's Hospital.
Cornish, Charles Vivian, St. Bartholomew's Hospital.
Cornish, Phillip Alfred, Middlesex Hospital.
Crawley, Herbert Edward, Oxford University.
Crompton, Richard Henry, University College, Liverpool.
Davies, Daniel, St. Bartholomew's Hospital.
Dismore, Henry Bertram, Guy's Hospital.
Dodd, Stanley, Westminster Hospital.
Douglass, William Claughton, St. Bartholomew's Hospital.
Dowman, Charles Darby Allen, St. Bartholomew's Hospital.
Dudding, John Scarbrough, London Hospital.
Dudgeon, Leonard Stanley, St. Thomas's Hospital.
Durance, William Arthur, Westminster Hospital.
Edington, Ernest Adolphus, University College, London.
Edmonds, Charles John Ernest, St. Thomas's Hospital.
Edwards, Charles, Guy's Hospital.
Edwards, David Richard, University College, Cardiff.
Ekins, Charles Maxwell, University College, London.
Esser, Samuel Jonathan David, London Hospital.
Evans, Arthur John, University College, London.
Evans, Sydney James, Guy's Hospital.
Everington, Francis Edgar, St. Bartholomew's Hospital.
Facey, Reginald Ambrose, St. Mary's Hospital.
Farquharson, Charles Henry, St. Mary's Hospital.
Fawssett, Basil, St. Thomas's Hospital.
Fenton, Thomas Gerald, St. Thomas's Hospital.
Flewitt, Charles York, Mason College, Birmingham.
Flint, Harold Edwards, St. Bartholomew's Hospital.
Forbes, Cyril Donald Edward, St. George's Hospital.
Forrest, Bertie Thomas, St. Thomas's Hospital.
Francis, James Bernard Chalmers, Westminster Hospital.
Fyffe, Robert James, Firth College, Sheffield.
Goble, Edwin Wallace, Guy's Hospital.
Gould, Reginald, London Hospital.
Graham, William Earnest, St. Bartholomew's Hospital.
Greaves, Herbert Stanley, St. Bartholomew's Hospital.
Green, Samuel Morris, University College, Liverpool.
Grenfell, Pascoe Beville, St. Bartholomew's Hospital.
Gubbins, John Gaspard, St. Thomas's Hospital.
Haig, Thomas Baker, St. Bartholomew's Hospital.
Halliday, John Rutherford, London Hospital.
Hamilton, William Gavin, St. Bartholomew's Hospital.
Hammerton, George Herbert Leonard, Firth College, Sheffield.
Hartley, John Dawson, St. Bartholomew's Hospital.
Harvey, Joseph Frederick, Mason College, Birmingham.
Hawkes, Alfred Ernest Underwood, University College, Liverpool.
Hearn, Edward Michael William, London Hospital.
Hearn, Ethelbert, Firth College, Sheffield.
Hemstead, Henry, University College, Bristol.
Herklots, Gerald Andreas, University College, London.
Hicks, Charles Edward, Guy's Hospital.
Higson, Thomas, Owens College, Manchester.
Hobbs, Albert Remington, St. Mary's Hospital.
Hollicks, Hubert Harry, Mason College, Birmingham.
Holmes, Willmot, St. Mary's Hospital.
Hope, Walter Bayard, Guy's Hospital.
Horsbrugh, Charles Bethune, University College, Bristol.
Hubert, Edgar Hamilton, St. George's Hospital.
Humby, Harry Robinson, St. Bartholomew's Hospital.
Humby, John Daniel Dawson, St. Bartholomew's Hospital.
Hunt, John William, St. Mary's Hospital.
James, Frederick William, University College, London.
Jefferiss, Iain McKinnon, King's College, London.
Jones, Bertrand Seymour, St. Thomas's Hospital.
Kelly, Thomas Thelwell, Guy's Hospital.
Kerfoot, Stanley James, London Hospital.
Lamb, Ralph, University College, Liverpool.
Leclézio, George Joseph Alexis, St. Bartholomew's Hospital.
Lee, Charles, Firth College, Sheffield, and Guy's Hospital.
Leonard, William Hugh, St. Bartholomew's Hospital.
Lewis, Ivor Cadwaladyr, St. Bartholomew's Hospital.
Loosely, William Henry, Guy's Hospital.
McClintock, John, King's College, London.
McLachlan, Arthur Ronald, Guy's Hospital.
Mason, Herbert Alfred, Firth College, Sheffield.
Mayne, William Boxer, University College, London.
Miller, John, Owens College, Manchester.
Mitchell, Edward Percival, Guy's Hospital.
Muir, Berthold, Guy's Hospital.
Neave, Sheffield, St. Bartholomew's Hospital.
Oates, James Christopher, Mason College, Birmingham.
O'Hea, John, St. Bartholomew's Hospital.
Olivey, John Michael Abraham, St. Thomas's Hospital.
Parsons, Ernest Alsager, Mason College, Birmingham.
Perks, John, St. Bartholomew's Hospital.
Pinches, Horace George, St. Thomas's Hospital.
Pinker, Henry George, St. Bartholomew's Hospital.
Pomeroy-Trood, Scobell, St. Bartholomew's Hospital.
Price, Edwin Edgar Montague, Mason College, Birmingham.
Price, Sydney Edgar, Mason College, Birmingham.
Prichard, John Llewelyn, University College, Liverpool.
Prins, Henry Mallock, University College, London.
Pugh, Arthur Bailey, St. Bartholomew's Hospital.
Randolph, William Henry, St. Bartholomew's Hospital.
Rodil, Juan José, Guy's Hospital.
Rogers, Frederick Colin, St. Mary's Hospital.
Rowland, Frank, Mason College, Birmingham.
Sanders, Edward Arthur, King's College, London.
Scorah, Ernest John, Firth College, Sheffield.
Scott, Edward Fletcher, Guy's Hospital.
Sheldon, Arthur Izod, University College, London.
Shorland, George, Guy's Hospital.
Simpson, Graham Scales, Guy's Hospital.
Smith, Alan Ayre, Guy's Hospital.
Smith, Leonard Satchwell, Mason College, Birmingham.
Smith, Sydney, University College, London.
Smith, Thomas Shalden, St. Mary's Hospital.
Smith, Thomas William, Charing-cross Hospital.
Softly, Alfred Ernest, St. Thomas's Hospital.
Speirs, William Clark, St. Mary's Hospital.
Stephens, Henry Zouch, St. Thomas's Hospital.
Sykes, Walter, Owens College, Manchester.
Takaki, Yashihiro, St. Thomas's Hospital.
Talbot, Ashly West, Guy's Hospital.
Thomas, Alfred Messer, Guy's Hospital and Durham University.
Thomas, William Murray, Guy's Hospital.
Thompson, Cecil Charles Brandon, St. Bartholomew's Hospital.
Thompson, Heny Bates, Mason College, Birmingham.
Thornley, Robert Lewis, St. Bartholomew's Hospital.
Tredgold, Alfred Frank, London Hospital.
Twort, Frederick William, St. Thomas's Hospital.
Velenski, John Charles, London Hospital.
Vickers, Thomas Hedley, St. Mary's Hospital.
Vincent, Ralph Harry, St. Bartholomew's Hospital.
Visger, Charles, University College, London.
Wakefield, Walter, Mason College, Birmingham.
Walker, Robert, St. Bartholomew's Hospital.
Waters, James, Middlesex Hospital.
West, John Arthur, St. Bartholomew's Hospital.
Ward, Oswald Erasmus, Mason College, Birmingham.
Weston, Herbert Ernest, St. George's Hospital.
Wethered, Ernest, St. Bartholomew's Hospital.
White, Cyril Charles Coleby Kirke, St. Bartholomew's Hospital.
Wilkinson, Edgar Sheldon, St. Bartholomew's Hospital.
Williams, Eric Wadlow, St. Mary's Hospital.
Wilson, Hugh Cameron, St. Mary's Hospital.
Winterbotham, Rayner, University College, London.
Woodforde, Robert E. Heighes, St. Bartholomew's Hospital.
Wood-Hill, Henry Gilbert, St. Bartholomew's Hospital.
Wright, Thomas James, Guy's Hospital.

Part IV., Elementary Anatomy :—

Acland, Hugh Thomas Dyke, St. Thomas's Hospital.
Agate, Henry St. Arnaud, St. Mary's Hospital.
Alderson, Percy Francis, Middlesex Hospital.
Allen, Walter Francis, London Hospital.
Anley, Frederick Eustace, Charing-cross Hospital.
Atkins, John, Guy's Hospital.
Aubrey, Thomas, University College, Bristol.
Austin, Elfred Chalmers, St. Mary's Hospital.
Bagshawe, Herbert Vale, Guy's Hospital.
Baker, Arthur Russell, St. Bartholomew's Hospital.
Baker, William Lincoln, St. Mary's Hospital.
Barlow, Edward Hovenden, Guy's Hospital.
Barnes, Arthur Stanley, Mason College, Birmingham.
Bartlett, Ernest John Reeve, King's College, London.
Bastian, William, University College, London.
Baxter, Charles Thomas, Middlesex Hospital.
Beale, Hanway Richard, St. Thomas's Hospital.
Beard, Joseph, Firth College, Sheffield.
Beaumont, Noel Charles, St. Bartholomew's Hospital.
Bell, John Cunningham, University College, London.
Bennett, Charles Harold, St. Mary's Hospital.
Bennett, William Frederick Cockayne, Firth College, Sheffield.
Betts, Alfred John Vernon, Westminster Hospital.
Bevan, Arthur, St. Thomas's Hospital.
Black, Guy, St. Thomas's Hospital.
Blake, Frederick James Gay, Yorkshire College, Leeds.
Blake, Percy Ryall, London Hospital.
Bodman, Christopher Osmond, University College, Bristol.
Borrow, Frederick Charles, St. Bartholomew's Hospital.
Bourdas, Ernest Clarkson, St. Thomas's Hospital.
Brockwell, John Brocas Chambers, Guy's Hospital.
Brook, Francis William, Guy's Hospital.
Brown, Alexander, King's College, London.
Browne, Thomas Walker Stanley, Guy's Hospital.
Bryan, Clement Arthur Douglas, Guy's Hospital.
Bullen, Edward Henry, St. Mary's Hospital.
Burgess, Percy Charles, Middlesex Hospital.
Burrows, Harold, St. Bartholomew's Hospital.
Calvert, Hubert, St. Thomas's Hospital.
Carter, Robert Markham, St. George's Hospital.
Causton, Albert Edward, Guy's Hospital.
Chapman, Donald Poyntez, Charing-cross Hospital.
Chetwood, Thomas, London Hospital.
Clarke, Edward Murray, University College, Cardiff.
Clarke, Henry Hugh Rose, St. Thomas's Hospital.
Coleman, Frank, Charing-cross Hospital.
Coleridge, Alfred, University College, Bristol.
Collyns, John Moore, St. Bartholomew's Hospital.
Compton, Spencer Langley, University College, Bristol.
Cook, Lewis, Westminster Hospital.
Cooke, Reginald Torriano, St. Bartholomew's Hospital.
Cooper, Walter Edward, University College, London.
Cope, Gilbert Edgar, Westminster Hospital.
Corbet, Sidney D'Alton, St. George's Hospital.
Cornish, Charles Vivian, St. Bartholomew's Hospital.
Cornish, Philip Alfred, Middlesex Hospital.
Cunningham, John Francis, St. Thomas's Hospital.
D'Aguilar, John Burton Stockwell, University College, Bristol.
Danks, Walter Seymour, St. Bartholomew's Hospital.
Davey, John Bernard, Middlesex Hospital.

Davis, Alexander Montague, Mason College, Birmingham.
Davies, Arthur Gerald Capel, Guy's Hospital.
Davies, Daniel, St. Bartholomew's Hospital.
Davies, Enoch Howell, University College, Cardiff.
Deas, Percival Bruce, St. Mary's Hospital.
Denny, Herbert Reginald Harry, Guy's Hospital.
Densham, Alec, Guy's Hospital.
Dick, Walter, University College, London.
Dismorr, Harry Bertram, Guy's Hospital.
Dodd Stanley, Westminster Hospital.
Doubble, Meredith Sedgwick, Charing Cross Hospital.
Drake-Brockman, Henry George, St. George's Hospital.
Dudding, John Scarbrough, London Hospital.
Dudgeon, Leonard Stanley, St. Thomas's Hospital.
Dunstan, Walter Robert, London Hospital.
Edington, Ernest Adolphus, University College, London.
Edmonds, Charles John Ernest, St. Thomas's Hospital.
Edwards, David Richard, University College, Cardiff.
Elwes, Frederick Fenn, Middlesex Hospital.
Evans, Arthur John, University College, London.
Evans, Sydney James, Guy's Hospital.
Farquharson, Charles Henry, St. Mary's Hospital.
Fawssett, Basil, St. Thomas's Hospital.
Fenton, Thomas Gerald, St. Thomas's Hospital.
Flewitt, Charles York, Mason College, Birmingham.
Foster, Henry Bertram, Guy's Hospital.
Fowler, Edwin Samuel George, Yorkshire College, Leeds.
Frear, Alexander, St. Mary's Hospital.
Frost, Cecil Scarlett, St. Bartholomew's Hospital.
Frost, Joseph Reginald, University College, Bristol.
Fyffe, Robert James, Firth College, Sheffield.
Gaff, James, St. Thomas's Hospital.
Gandy, Thomas Hall, St. Bartholomew's Hospital.
Gee, Claude Alfred Heath, University College, Bristol.
Goble, Edwin Wallace, Guy's Hospital.
Goode, George Ernest, London Hospital.
Goodman, Harold, St. Bartholomew's Hospital.
Goodwin, William Richard Power, St. Mary's Hospital.
Graham, William Ernest, St. Bartholomew's Hospital.
Greaves, Herbert Stanley, St. Bartholomew's Hospital.
Grenfell, Pascoe Beville, St. Bartholomew's Hospital.
Gribbell, William Ernest, St. Mary's Hospital.
Gubbins, John Gaspard, St. Thomas's Hospital.
Haig, Thomas Baker, St. Bartholomew's Hospital.
Harris, Herbert Stocker, St. Thomas's Hospital.
Hartley, John Dawson, St. Bartholomew's Hospital.
Harvey, Joseph Frederick, Mason College, Birmingham.
Hawes, Colin Sadler, St. Bartholomew's Hospital.
Hawker, Herbert, University College, London.
Hayden, William Chatterley, St. Mary's Hospital.
Hearn, Edward Michael, London Hospital.
Heath, Philip Maynard, University College, London.
Higgens, Hugh Arthur, Guy's Hospital.
Higson, Thomas, Owens College, Manchester.
Hodgson, Harold West, London Hospital.
Hodgson, Robert Edward, St. Mary's Hospital.
Hollick, Hubert Harry, Mason College, Birmingham.
Horsbrugh, Charles Bethune, University College, Bristol.
Horton, Horatio Nelson, Middlesex Hospital.
Hubert, Edgar Hamilton, St. George's Hospital.
Hughes, Frank Percival, University College, Bristol.
Hunt, John William, St. Mary's Hospital.
Ingram, Percy Cecil Parker, University College, Cardiff.
Inman, William Sam, Firth College, Sheffield.
James, Charles Wilmot Wanklyn, University College, Bristol.
James, Frederick William, University College, London.
Jeaffreson, Dudley, St. Bartholomew's Hospital.
Jefferiss, Frederick Burroughs, King's College, London.
Jefferiss, Iain Mackinnon, King's College, London.
Jones, Arthur Webb, St. Thomas's Hospital.
Jones, Bertrand Seymour, St. Thomas's Hospital.
Lamb, Ralph, University College, Liverpool.
Lamborn, William Alfred, Middlesex Hospital.
Lees, Charlie, Charing-cross Hospital.
Leggatt, Claude Edward Heish, St. Mary's Hospital.
Leonard, William Hugh, St. Bartholomew's Hospital.
Lewis, Ivor Cadwaladyr, St. Bartholomew's Hospital.
Lewis, William Edward Vaughan, Mason College, Birmingham.
Lilley, Ernest Lewis, Charing Cross Hospital.
Loosely, William Henry, Guy's Hospital.
Low, George Harvey, St. Bartholomew's Hospital.
McEnnery, Ambrose Richard, University College, Bristol.
McMullen, William Halliburton, King's College, London.
Mason, Herbert Alfred, Firth College, Sheffield.
Mayne, William Boxer, University College, London.
Meredeth, Richard William Herbert, Middlesex Hospital.
Merry, Edward, London Hospital.
Miller, John, Owens College, Manchester.
Mitchell, Edward Percival, Guy's Hospital.
Morgan, John David, St. Mary's Hospital.
Morley, Arthur Solomon, St. George's Hospital.
Morris, Herbert Edward, Guy's Hospital.
Moss, Bertram Wilmore, Guy's Hospital.
Muir Berthold, Guy's Hospital.
Munro, Donald John, Guy's Hospital.
Muter, Charles William, King's College, London.
Neave, Sheffield, St. Bartholomew's Hospital.
New, John Sherwood, University College, London.
Nicholls, Percival Thomas, Middlesex Hospital.
Nitch, Cyril Alfred Rankin, St. Thomas's Hospital.
Nutt, Harold Rothery, St. Mary's Hospital.
Oates, James Christopher, Mason College, Birmingham.
O'Hea, John, St. Bartholomew's Hospital.
Olivey, John Michael Abraham, St. Thomas's Hospital.
Orford, Herbert John, Mason College, Birmingham.
Osborn, Alfred Gelsthorpe, Guy's Hospital.
Parsons, Ernest Alsager, Mason College, Birmingham.
Passmore, William Henry, Charing Cross Hospital.
Paul, John Frederick, St. George's Hospital.
Peach, William Frank, St. Mary's Hospital.
Peck, William Edward, University College, London.
Peirce, Thomas James, St. George's Hospital.
Perrin, Thomas, St. Thomas's Hospital.
Pinches, Horace George, St. Thomas's Hospital.
Pollard, Herbert Dean, London Hospital.
Pooley, John Milnes, St. Mary's Hospital.
Pretty, Harold Cooper, University College, London.
Price, Edwin Edgar Montague, Mason College, Birmingham.
Price, Sydney Edgar, Mason College, Birmingham.
Pring, Charles Herbert, University College, Bristol.
Prins, Henry Mallock, University College, London.
Pugh, Arthur Bailey, St. Bartholomew's Hospital.
Randolph, William Henry, St. Bartholomew's Hospital.
Ransford, Alan Carpmael, Guy's Hospital.
Reeve, Herbert Midgley, Guy's Hospital.
Reid, Archibald Douglas, King's College, London.
Rodil, Juan José, Guy's Hospital.
Rogers, Frederick Colin, St. Mary's Hospital.
Rowland, Frank, Mason College, Birmingham.
Russell-Risien, Ernest, St. Bartholomew's Hospital.
Rutter, Thomas Francis, Guy's Hospital.
Sanders, Edward Arthur, King's College, London.
Sanders, James Herbert, London Hospital.
Scorah, Ernest John, Firth College, Sheffield.
Scott, Edward Fletcher, Guy's Hospital.
Scott, Sydney Richard, St. Bartholomew's Hospital.
Scott, Henry Martin, Charing-cross Hospital.
Scrase, James John Sheat, St. Bartholomew's Hospital.
Secretan, Walter Bernard, Guy's Hospital.
Segreda, Francisco Arturo, Guy's Hospital.
Sells, Lionel, St. Thomas's Hospital.
Sheehan, Michael, Queen's College, Cork.
Sheldon, Arthur Izod, University College, London.
Sherren, James, London Hospital.
Simpson, Graham Scales, Guy's Hospital.
Simpson, John Edgar, University College, London.
Smith, Alan Ayr, Guy's Hospital.
Smith, Percy Nelson, St. Mary's Hospital.
Smith, Sydney, University College, London.
Smith, Thomas Shalden, St. Mary's Hospital.
Softly, Alfred Ernest, St. Thomas's Hospital.
Speers, William Gordon, St. Mary's Hospital.
Speirs, George Benjamin Armes, St. Mary's Hospital.
Sprague, Francis Henry, St. Mary's Hospital.
Sprawson, Cuthbert Allan, King's College, London.
Staines, Tom Fenn, King's College, London.
Stanley, Edmund Hamilton Blake, University College, London.
Stephens, Henry Zouch, St. Thomas's Hospital.
Stevens, Stanley, St. Bartholomew's Hospital.
Stevens, Warwick Alan George, Guy's Hospital.
Stewart, Walter Graham, Guy's Hospital.
Stock, Philip Graham, University College, Bristol.
Stokes, Percy Southwall, Firth College, Sheffield.
Stratford, Howard Martin Blenheim, Oxford University.
Swan, Russell Henry Jocelyn, Guy's Hospital.
Takaki, Yoshihiro, St. Thomas's Hospital.
Talbot, Ashley West, Guy's Hospital.
Tayler, Henry Christopher, St. Mary's Hospital.
Thomas, Harold Sebert, St. Bartholomew's Hospital.
Thomas, William Murray, Guy's Hospital.
Thompson, Joseph Bernard, University College, London.
Townroe, Eugene Dunbar, St. George's Hospital.
Tredgold, Alfred Frank, London Hospital.
Truman, Dudley Beckit, King's College, London.
Trumper, William Arthur, St. Mary's Hospital.
Turner, Frank Douglas, Guy's Hospital.
Twort, Frederick William, St. Thomas's Hospital.
Vaughan, Arthur Llewellyn, St. Bartholomew's Hospital.
Vawdrey, Percy Llewellyn, St. Bartholomew's Hospital.
Velenski, John Charles, London Hospital.
Vickers, Thomas Hedley, St. Mary's Hospital.
Vine, Alfred Bertram, Middlesex Hospital.
Visger, Charles, University College, London.
Von Rosen, Alfred Dittlof Benedictus, St. Mary's Hospital.
Walker, Lewis Augustus, St. Bartholomew's Hospital.
Ward, Oswald Erasmus, Mason College, Birmingham.
Waters, James, Middlesex Hospital.
Waters, Walter James, St. Thomas's Hospital.
Watson, Robert Nimmo, Westminster Hospital.
Wells, Albert John Walton, St. Bartholomew's Hospital.
Wells, Hardy Vesey, St. Mary's Hospital.
Weston, Alfred Fullam, St. George's Hospital.
Wethered, Ernest, St. Bartholomew's Hospital.
White, Charles Vaughan, St. Thomas's Hospital.
White, Cyril Charles, Coleby Kirke, St. Bartholomew's Hospital.
White, Percy Walter, University College, Bristol.
Wilkes, Alfred Ernest Frear, Mason College, Birmingham.
Williams, Eric Wadlow, St. Mary's Hospital.
Williams, Sydney Rice, University College, Bristol.
Winterbotham, Rayner, University College, London.
Woodcock, Henry Chadwick, St. Mary's Hospital.
Wood-Hill, Henry Gilbert, St. Bartholomew's Hospital.
Wright, Thomas James, Guy's Hospital.

SOCIETY OF APOTHECARIES OF LONDON. — The following gentlemen were admitted Licentiates in April :—

J. MacD. Troup, W. H. Daw, T. H. Hunt, J. H. P. Vivian, and A. H. Trevor.

The following candidates have passed in the subjects indicated :—

Surgery.—W. Allen, Birmingham; W. H. Daw, London Hospital; F. W. Gale, St. Bartholomew's Hospital; J. Hepple, Leeds; T. H. Hunt, Leeds; T. H. P. Peers, Charing-cross Hospital; G. R. Smith, Manchester.

Medicine, Forensic Medicine, and Midwifery.—C. N. Barton, St. George's Hospital; W. H. Daw, London Hospital; R. Hedden,

Guy's Hospital; T. H. Hunt, Leeds; A. S. Lawrence, Middlesex Hospital; J. M. Troup, King's College.
Medicine and Forensic Medicine.—G. P. Y. Hulbert, Birmingham and Charing-cross Hospital; J. H. P. Vivian, St. Thomas's Hospital.
Medicine and Midwifery.—J. Hepple, Leeds; and E. P. Hewitt, St. Mary's Hospital.
Medicine.—H. G. Jones, St. Mary's Hospital; and W. McCall, Charing-cross Hospital.
Forensic Medicine.—J. W. F. Graham, St. Bartholomew's Hospital; and A. H. Trevor, Guy's Hospital.

EDINBURGH UNIVERSITY.—The following gentlemen have received the under-mentioned degrees:—
Bachelor of Medicine and Master in Surgery.—James Andrew Gibson; Thomas Smith.
Bachelor of Science.—George Waterston Miller; William Morrison, M.B., C.M.; James Alexander Murray.*
* Passed with special distinction in zoology and comparative anatomy.

FOREIGN UNIVERSITY INTELLIGENCE.—*Vienna:* Dr. Max Herz and Dr. Franz Chrostek have been recognised as *privat-docents* in Medical Pathology.

VACCINATION GRANT.—Mr. Philip Edward Hill, M.R.C.S., public vaccinator for the No. 1 district of the Clerkenwell Union, has been awarded, for the ninth time in succession, the Government grant for efficient vaccination.

CENTENARY OF THE ABERNETHIAN SOCIETY.—A conversazione in commemoration of the centenary of the Abernethian Society will be held at St. Bartholomew's Hospital on May 1st. Former St. Bartholomew's men will welcome this opportunity of meeting the friends of earlier days, and will find that exceptionally effective arrangements have been made for the evening's entertainment. The History of the Abernethian Society will form the subject of an address by Dr. Norman Moore. Messrs. F. A. Smith and T. Ashby Barron are the honorary secretaries.

THE NEED FOR PUBLIC SLAUGHTER-HOUSES.—At a meeting of the Church Sanitary Association, held at the Church House, Westminster, on Tuesday last, under the presidency of Dr. Norman Kerr, a paper contributed by Dr. Francis W. Clark, medical officer of health, Lowestoft, on "The Need for Public Slaughter-houses" was read by the Rev. Canon Reith. The writer of the paper said there were numerous Acts designed to prevent the adulteration of food, but the motive of these had been, for the most part, the purely commercial one of depreciated value, and not the hygienic one of wholesomeness. The cocoa and vinegar sold by the grocer were sampled, and penalties inflicted if they were not pure; but when it came to our meat supplies people were content to purchase anything provided only that "it looked all right." Few sanitary authorities had seen the wisdom of providing for the due and proper slaughtering and the adequate inspection of all animals for human food, and a lesson might well be learnt from our Continental neighbours, who were far ahead of us in this respect. The slaughtering of animals for food was an operation which must necessarily be attended by a certain amount of nuisance and danger to the health of those in the immediate vicinity, unless it was carried out with the most ample sanitary conveniences and appliances, and therefore the English system of private slaughter-houses must be fraught with danger to the public health. The stabling of cattle, sheep, and pigs in the actual slaughter-house itself were among the least of the defects of these private slaughter-houses, while overcrowding, deficiency of light and of ventilation were to be found in almost all of them. The greatest danger, however, of the English system of slaughtering arose from the failure to detect and destroy all diseased and unwholesome carcases, and as a consequence much flesh was constantly offered for sale, especially in the poorer quarters, which was unfit for human food. It was unquestionable that tubercle could be conveyed to man by the ingestion of the flesh of tuberculous cattle, and it was an admitted fact that an appreciable proportion of English cattle were tuberculous. One of the most important factors in the prevalence of consumption throughout England was the unrestricted use of milk from tuberculous cows and the eating of imperfectly cooked tuberculous beef. The public must be taught that they cannot estimate the quality of meat by a mere casual inspection, and he hoped that the Church Sanitary Association and the clergy generally would try to rouse public opinion to a truer recognition of the value of sound and wholesome food. After some remarks from the Chairman, Canon Reith, the Rev. M. C. F. Morris, and the Rev. E. C. C. Parr, the proceedings closed.

MEDICAL MAGISTRATE.—Dr. James Smith Watson of Blackburn has been placed on the Commission to the Peace for that borough.

THE festival dinner of the Royal Hospital for Children and Women, Waterloo Bridge-road, S.E., will be held at the Whitehall Rooms, Hôtel Métropole, on Saturday evening, May 4th, 1895, at 7 P.M. The Hon. W. F. Danvers Smith, M.P., will preside.

FOOTBALL CASUALTIES.—On the 13th inst., during a match on the Chanonry grounds between the Aberdeen and Clachnacuddin teams, a player fractured his left clavicle.—At Redruth on Saturday last in a match between the Cornwall and Redruth teams a home forward badly fractured his leg.

ROYAL BRITISH NURSES' ASSOCIATION.—The last sessional lecture of the season was delivered at 17, Old Cavendish-street on Friday, April 19th, before an appreciative audience by Miss Annesley Kenealey, the subject being Women as Lecturers. The chair was taken at 8 P.M. by Dr. C. Gage Brown, C.M.G. A discussion took place at the conclusion of the lecture.

DR. G. A. W. WATSON, assistant to Dr. Briscoe, met with a fatal accident at Chippenham. He had been attending a patient at Spire View, London-road, and on coming out attempted to mount his horse, but the animal reared and threw him. Mr. Wilson was first on the scene, and subsequently Dr. Briscoe arrived, but despite every care Dr. Watson never regained consciousness and passed away. He came from Strichem, Aberdeen, and was an M.A. and M.B. of Aberdeen University.

PATHOLOGICAL DEPARTMENT, UNIVERSITY COLLEGE, LIVERPOOL.—Owing to the liberality of Mr. George Holt, the founder of the chair, the department of Pathology and Bacteriology at University College, Liverpool, has been provided with temporary accommodation in Ashton Hall, a house adjoining the College, which has been purchased and most efficiently equipped for the purpose. The apparatus and fittings necessary for teaching and private research are very complete. The new institute is now ready for occupation and will be formally opened at the beginning of the summer session. It consists of three floors, containing separate laboratories for the study of morbid anatomy and histology, bacteriology, experimental and chemical pathology and research. In addition there are photographic rooms, balance room, library, students' rooms, workshop, stable accommodation, and lodges for attendants.

ÆSCULAPIUS LODGE OF FREEMASONS.—The last meeting of this lodge for the present Masonic year was held at the Café Royal, Regent-street, on the 10th inst. There were a large number of members and some visitors present. G. Crawford Thomson, M.D., was unanimously elected Master for the ensuing year, and J. Pickett, M.D., treasurer. In consequence of Dr. G. Danford Thomas having been offered a warden's chair he was not again a candidate for the office of treasurer, which office he has so ably filled for four years. Thomas Dutton, M.D., M.R.C.P. Edin., was reappointed secretary; Leonard Wilde, M.D., M.R.C.P. Lond., was admitted to the third degree; and George Herschell, M.D. Lond., M.R.C.S. Eng., was admitted into Freemasonry. T. H. Openshaw, M.B., F.R.C.S. Eng., was proposed as a joining member. Two guineas out of the charity fund were voted for Mr. C. Bryan Townshend's case, and 3 guineas for a widow of a medical Mason; £3 10*s.* was collected for the late Brother Surgeon-Major Parke's Memorial Fund, 2 guineas being previously voted by the lodge. The secretary reported that he had already received the names of most of the medical Grand Officers as patrons in support of the smoking concert, to be given at the Portman Rooms, to all medical Masons who may visit London during the meeting of the British Medical Association. The lodge was then closed; the brethren afterwards dined together.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

The Easter Recess.

THE House of Commons brought its holiday to a close on Monday, April 22nd. The House of Lords met on the same day, but only for formal business, and adjourned again until Tuesday, April 30th.

The Bovine Tuberculosis Commission.

The report of this Commission has at last been presented to Parliament. It was laid on the table in manuscript on April 22nd, and is now being printed with a view to publication.

The Age Limit in Factories and Workshops.

Sir John Gorst, in anticipation of the committee stage of the Factories and Workshops Bill, has given notice of his intention to move the insertion of a clause to the effect that no child under the age of twelve years shall be employed in a factory or workshop. The present limit is eleven years.

Health Arrangements in Prisons.

In the report of the Departmental Committee on Prisons a section is devoted to the subject of health. The Committee refer to the common assertion that not only is the ratio of insanity far higher in prisons than among the general population, but that prison life itself is a potent cause in its development, and they arrive at certain general conclusions. They think that an early opportunity should be taken of appointing an additional member of the Prisons Board, who should be a medical man, the new office taking the place of the present medical inspectorship. They point out that detection of disease in its earliest stage taxes the skill of the practitioner to its fullest extent, and that in mental diseases this is especially the case. Here medical men of great skill and experience, but without any special training in this department of their art, are undoubtedly at a disadvantage. It appears to the Committee, therefore, that it might with advantage be made a condition of medical appointments in prisons that the candidate should produce evidence of having given special attention to the subject of lunacy. In Belgium the services of physicians specially conversant with mental disorders are retained for the purpose of detecting cases of incipient insanity which might have escaped a less practised eye, and the Committee think that some step of this kind might perhaps be taken, especially with a view of inspecting convicts during their period of isolation. Later the Committee say that in some of the larger prisons it appears to them that the work incumbent on the medical staff is such as to render it very difficult for them to give the detailed and prolonged attention to individual cases which alone can secure the sifting out of such as require special treatment. On the curative and preventive effects of outdoor exercise and labour the Committee state that their medical witnesses were practically unanimous. There are undoubted obstacles to this in the limited space which surrounds most prisons and in the fact that the supervision of prisoners in the open air necessitates some increase in the staff of warders. Nevertheless the Committee regard the object in view as so important as to justify great efforts and some expense with the view of effecting it so far as may be practicable. With regard to weak-minded prisoners the Committee recommend that they should be concentrated so far as is possible in special prisons and put under special medical supervision, and that it should be considered whether it is right to treat such persons as ordinary criminals.

HOUSE OF COMMONS.

MONDAY, APRIL 22ND.

Sea Squalls and Loss of Life.

In the course of a question addressed to the Board of Trade, Mr. Harry S. Foster called attention to a letter written by the coxswains of the Walmer and Deal lifeboats, stating that in their experience it was very difficult to distinguish at times what was required when they saw signals fired at sea, and that on several occasions they had launched their boats at the risk of their lives in answer to signals supposed to be distress signals, only to find that the vessels firing them did not require assistance.—Mr. Burt, replying on behalf of the Board of Trade, assured the hon. member and the House that the existing distress signals are quite distinctive, and that if they are properly used no confusion should arise. They were international signals and had worked well for many years, and the Board of Trade saw no occasion for further action or inquiry with regard to them. If the signals were improperly used claims for salvage might be made under the Merchant Shipping Act against the masters and owners of the ships so using them.

The Factories and Workshops Bill.

Nearly the whole time of the House at this sitting was occupied with a second reading debate on this measure. Without exception, the speakers expressed approval of the general scope of the Bill, although many of them advocated important changes in its several provisions. When the debate was over and the Bill read a second time it was decided, on the motion of Mr. Asquith, to refer the Bill to the Grand Committee on Trade in order that it may be thoroughly discussed in detail.

Mr. Stuart Wortley, the Under Secretary of State for the Home Department in the late Administration, made some reference to the provision requiring medical practitioners to notify certain classes of disease. This provision, he said, would have great statistical value, and might not be without preventive usefulness, but he was curious to know how the medical profession regarded it. If the Home Secretary was able to assure them that the medical profession had been made aware of the provision and did not offer any serious objection to it, then he would be satisfied and say no more upon the subject.

Mr. Tennant, who is Mr. Asquith's private secretary, and, therefore, spoke with a certain measure of authority, assured the hon. gentleman that there could be no difficulty in this connexion, because the provision simply embodied the principle of the Infectious Diseases (Notification) Act of 1889, which had worked admirably and produced most excellent results.

Mr. Henry Broadhurst called attention among other things to the cutlery trade in Sheffield. In the four years from 1888 more than half the cutlers and grinders who died in that city died from chest and throat diseases, and this mortality was caused mainly by the inhalation of particles of grit and stone. The medical officer of Sheffield had described in a recent report the shockingly unhealthy conditions in which large numbers of men carried on their work, and seeing that Sheffield was, on the whole, a rich and enterprising place and possessed a great municipality, he suggested as a means of getting at the root of this evil that municipal workshops should be erected and the poor workers released in this way from their present unhealthy dens.

Mr. Asquith made a long speech explaining further the position of the Government. In one of the clauses there would be found, he said, a prohibition as to the use of lead in the process of tinning or enamelling metal hollow-ware cooking utensils. That was founded upon evidence given before, and recommendations made by, committees that had inquired into these industries. He was satisfied that the best manufacturers did not employ lead, and that its use for that purpose was found to be most injurious. The Government had provided by Clause 30 that in certain industries, such as the making of wearing apparel, the temperature should be kept up to not less than 60° F. Complaints had been made to the Home Office by the lady inspectors, who went through the shops in London and other large towns, that during winter a number of persons employed in dressmaking had to carry on their occupations in rooms which were either not warmed at all or were very insufficiently warmed, and under conditions, therefore, of great discomfort and risk of injury to health. As to the bakehouses, he proposed when the Bill got into Committee to add to the clause which deals with them a provision prohibiting for the future the use of underground premises. He was satisfied from what master and man alike had told him that both were agreed that for the future the trade ought not to be carried on in underground cellars. With regard to overtime, he did not in the least disguise the fact that he should have been glad if possible to put a stop to it altogether, but he trusted the concession made in the Bill, which was a compromise between the extreme views on the one side and the other, would be received with general acceptance.

TUESDAY, APRIL 23RD.

The Indian Government and the Purchase of Opium.

Sir Edward Grey, replying to a question by Mr. Schwann, said that Sir James Westland was correctly reported to have stated in his Budget speech at Calcutta that the Indian Government had made arrangements for the purchase of crude opium in Malwa. The Secretary of State had no information as to the amount it was intended to purchase. Such arrangements were within the discretion of the Government of India, and did not require the sanction of the Secretary of State. Similar purchases of Malwa opium for the supply of the Indian demand had been made in previous years when the supply of Bengal opium had been short.

WEDNESDAY, APRIL 24TH.

Sale of Intoxicating Liquors (Ireland) Bill.

The House gave a second reading to this Bill, which proposes to extend Sunday Closing to the five cities now exempted—namely, Dublin, Belfast, Cork, Limerick, and Waterford; to close public-houses all over Ireland at nine o'clock on Saturday evenings; and to increase the limit qualification for *bonâ-fide* travellers from three to six miles.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.

ADAMS, E. G. B., L.R.C.P. Lond., M.R.C.S., has been appointed Junior House Surgeon for six months to St. Bartholomew's Hospital.

BEHRENDT, M. R. J., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer of Health for the Brumby and Frodhingham Urban Sanitary District.

BELBEN, F., M.B., B.S. Camb., L.R.C.P. Lond., F.R.C.S., has been appointed Senior House Surgeon for six months to St. Bartholomew's Hospital.

BOWES, T. A., M.B., B.S. Camb., has been appointed Senior House Surgeon for six months to St. Bartholomew's Hospital.

BROWN, DAVID, B.Sc., M.D. Lond., has been appointed Physician to the Taunton and Somerset Hospital.

BUCHAN, A. HILL, A.M., M.B., C.M., has been appointed House Physician to the Leith Hospital.

BURLAND, H., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health for the Finedon Urban Sanitary District.

BURTON, R. G., M.D., L.R.C.S. Edin., has been appointed Medical Officer of Health for the Greenford Urban Sanitary District.

CAMERON, A. W., M.B., C.M., has been appointed House Surgeon to the Leith Hospital.

CHRISTOPHERSON, J. B., M.B., B.S. Camb., has been appointed Junior House Physician for six months to St. Bartholomew's Hospital.

CHUTE, J., M.D., B.Ch. Dub., has been appointed Medical Officer of Health for the Kingston Urban Sanitary District.

COLBY, F. E. A., M.B., B.C., L.R.C.P. Lond., M.R.C.S., has been appointed Ophthalmic House Surgeon for six months to St. Bartholomew's Hospital.

COLBY, J. G. E., M.B., B.Ch. Oxon., L.R.C.P. Lond., F.R.C.S., D.P.H. Camb., has been appointed Medical Officer of Health for the Malton Rural Sanitary District and the Norton Rural District.

COLLYER, B., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed Senior House Physician for six months to St. Bartholomew's Hospital.

COUNSELLOR, RICHARD, L.R.C.P., L.M. Edin., has been appointed Medical Officer of Health for the Clitheroe Rural Sanitary District.

CROSS, E. W., L.R.C.P. Lond., M.R.C.S., has been appointed Obstetric Assistant for six months to St Bartholomew's Hospital.

CROSSMAN, F., L.R.C.P. Lond., M.R.C.S., has been appointed Junior House Surgeon for six months to St. Bartholomew's Hospital.

DRAKE, C. H., L.R.C.P. Lond., M.R.C.S., has been appointed Junior House Surgeon for six months to St. Bartholomew's Hospital.

ELIAS, JAMES, M.R.C.S., L.S.A., D.P.H. Camb., has been appointed Medical Officer of Health for the Borough of Neath, vice Dr. J. W. Thomas, resigned.

FISHER, O. S., L.R.C.P., L.R.C.S. Edin., L F P.S. Glasg., has been appointed Surgeon to the Jamaica Naval Hospital.

FLOYER, W. W., M.B. Lond., M.R.C.S., has been appointed Medical Officer for the Thorpe Sanitary District of the Chertsey Union.

FRASER, F., L.R.C.P. Lond., M.R.C.S., has been appointed Senior House Surgeon for six months to St. Bartholomew's Hospital.

GALBRAITH, WILLIAM, L.R.C.P., L.R.C.S. Edin., has been reappointed Medical Officer of Health for the South Gosforth Urban Sanitary District.

HAINES, J. W., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed House Surgeon to the Belgrave Hospital for Children.

HUMPHRY, E. S., L.R.C.P. Lond., M.R.C.S., has been appointed Senior House Surgeon for six months to St. Bartholomew's Hospital.

LAING, G. CAMPBELL, M.B., C.M., has been appointed Visitor for out-door cases to the Leith Hospital.

LEE, W. E., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed Junior House Physician for six months to St. Bartholomew's Hospital.

LEWIS, F. H., M.B., B.Ch. Camb., L.R.C.P. Lond., M.R.C.S., has been appointed Senior House Physician for six months to St. Bartholomew's Hospital.

MELLER, CHARLES BOOTH, L.R.C.P., M.R.C.S., L.S.A., L.M., has been appointed Medical Officer and Public Vaccinator for the Bonvilston District of the Cardiff Union.

MILROY, J. CUNNINGHAM, M.D. Edin., has been appointed Junior House Surgeon to the Royal Albert Edward Infirmary, Wigan, vice Richard S. Hardman, resigned.

MITCHELL, A. M., M.B., B.Ch. Camb., has been appointed Senior House Surgeon for six months to St. Bartholomew's Hospital.

MOXEY, VINCENT, has been appointed Honorary Medical Officer to the Holloway and North Islington Dispensary.

MURPHY, J. R., L.R.C.P. Lond., M.R.C.S., has been appointed Junior House Physician for six months to St. Bartholomew's Hospital.

ORME, W. B., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant Medical Officer at the Infirmary, Parish of St. Pancras.

PECK, W. G., M.B., B.S. Camb., has been appointed Surgeon to H.M.S. *Pilot*.

PERRAM, C. H., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed Senior House Physician for six months to St. Bartholomew's Hospital.

PHILLIPS, L. C. P., L.R.C.P. Lond., M.R.C.S., has been appointed Junior House Surgeon for six months to St. Bartholomew's Hospital.

RAWLINGS, J. D., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed Senior House Physician for six months to St. Bartholomew's Hospital.

ROGERS, R., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed Junior House Physician for six months to St. Bartholomew's Hospital.

SEWESTRE, R., M.B., B.S. Camb., L.R.C.P., M.R.C.S., has been appointed Extern Obstetric Assistant for six months to St. Bartholomew's Hospital.

SHARPIN, WALTER ARCHDALE, M.R.C.S. Eng., L.R.C.P. Lond., has been appointed House Surgeon to the Royal United Hospital, Bath.

SLOMAN, S. G., Junr., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Farnham Urban District Council.

TAYLOR, GEO., has been appointed Public Analyst for the Parish of Hackney.

TAYLOR, J. W., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health for the Netley Urban Sanitary District, vice Wigin.

TODD, L. B., L.R.C.P., M.R.C.S., has been appointed House Surgeon to the County Hospital, Leicester, vice Watkins, resigned.

WATERS, A. C., M.B., B.S. Durh., M.R.C.S., has been appointed Medical Officer of Health for the Borough of Southend-on-Sea, vice Jones.

WHITE, C. P., L.R.C.P. Lond., M.R.C.S., has been appointed Junior House Surgeon for six months to St. Bartholomew's Hospital.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

ADDENBROOKE'S HOSPITAL, Cambridge.—Resident House Physician. Salary £65 per annum, with board, lodging, and washing in the hospital.

CHARING-CROSS HOSPITAL, London, W.C.—Curator and Pathologist. Salary £100 per annum.

DENBIGHSHIRE INFIRMARY AND GENERAL DISPENSARY, Denbigh.—Honorary Medical Officer.

EAST LONDON HOSPITAL FOR CHILDREN, Glamis-road, Shadwell, E.—House Surgeon. Board, lodging, &c., provided.

FARRINGDON GENERAL DISPENSARY AND LYING-IN CHARITY, 17, Bartlett's-buildings, Holborn-circus, E.C.—Honorary Physician. Also Resident Medical Officer. Salary £100 per annum, with apartments and attendance.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, Bloomsbury, W.C.—Resident House Physician for six months; unmarried. Salary £20, with board and residence in the hospital.—Resident Medical Officer as House Surgeon for six months; unmarried. Salary £20, with board and residence in the hospital.

HOSPITAL FOR WOMEN (THE LONDON SCHOOL OF GYNÆCOLOGY), Soho-square, W.—Clinical Assistant.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, Shoreditch, N.E.—Physician to Out-patients. Applications to the Secretary, Offices, 27, Clement's-lane, E.C.

PARISH OF ST. PANCRAS.—Dispenser for the St. Pancras Workhouse. Salary £110 per annum, with dinner daily. Applications to the Clerk to the Guardians, Vestry Hall, Pancras-road, N.W.

ROTHERHAM HOSPITAL AND DISPENSARY.—Resident House Surgeon for three years. Salary £100 per annum, with rooms, washing, and commons (exclusive of alcoholic drinks).

SMEDLEY'S HYDROPATHIC ESTABLISHMENT, Matlock.—Junior Physician. Honorarium of £40 for first six months, and afterwards at the rate of £120 per annum, with board, lodging, &c.

ST. THOMAS'S HOSPITAL MEDICAL SCHOOL, Albert Embankment, London, S.E.—Lecturer on Physiology.

WEST RIDING ASYLUM, Wadsley, near Sheffield.—Fifth Assistant Medical Officer. Salary £100 per annum, rising £10 a year up to £150, with board &c.

WESTON-SUPER-MARE HOSPITAL AND DISPENSARY.—Medical Officer to the Provident Dispensary attached to the Hospital. Salary £80 per annum, with board, lodging, and washing.

Births, Marriages, and Deaths.

BIRTHS.

BYHAM.—On April 16th, at Spalding, the wife of Wm. L. Byham, L.R.C.P. Edin., of a son.

DOLAMORE.—On April 12th, at Queen Ann-street, W., the wife of W. H. Dolamore, M.R.C.S., L.R.C.P., &c., of a son.

FITZMAURICE.—On April 16th, at Horsted Keynes, Sussex, the wife of Richard Fitzmaurice, L.R.C.P. Edin., District Medical Officer, of a son.

HAWES.—On April 15th, at St. Stephen's-crescent, W., the wife of Francis Brunel Hawes, L.R.C.P., L.R.C.S.I., of Dolores, Pisagua, Chili, of a daughter.

HORSLEY.—On April 19th, the wife of Victor Horsley, F.R.S., of a daughter.

STROVER.—On April 17th, at Sandy, Beds, the wife of Herbert C. Strover, L.S.A. Lond., of a son.

WYNCOLL.—On April 19th, at Buckfastleigh, South Devon, the wife of J. W. Wyncoll, M.B., of a son.

MARRIAGES.

ABERCROMBIE—RANKIN.—On April 18th, at Bellahouston Parish Church, Glasgow, Peter Henderson Abercrombie, M.D., to Jessie Deans, second daughter of the late C. D. Rankin, Esq., of Carlton House, Bellahouston.

BULL—WHITE.—On April 20th, at St. George's, Edgbaston, by the Rev. F. H. Ward, M.A., Vicar of St. John's, Sparkhill, Birmingham, Edwin George Bull, M.B. and C.M. Univ. Edin., M.R.C.S. Eng., of Sparkhill, to Elizabeth Grace, daughter of William White, Lyndhurst, Chad-road, Edgbaston.

CARR—GRIFFITH.—On April 24th, at the Brixton-hill Wesleyan Church, John Walter Carr, M.D., of 19, Cavendish-place, W., to Jessie, daughter of Walter Griffith, of Palace-road, Streatham-hill.

CLARKSON—WRIGHT.—On April 18th, at 14, Belhaven-terrace, Glasgow, by the Rev. Thomas Adamson, B.D., Robert Durward Clarkson, M.B., C.M., B.Sc., Falkirk, eldest son of Robert Clarkson, Esq., Toravon, Stirlingshire, to Emily Burlton, second daughter of William Wright, 14, Belhaven-terrace.

GIDLEY—LUCAS.—On April 18th, at St. John's-the-Evangelist, Clifton, by the Rev. A. C. Anstey, assisted by the Rev. G. Forrester of Cullompton, Gustavus G. Gidley, M.R.C.S. Eng., L.R.C.P. Lond., of St. Andrews Villa, Cullompton, Devon, to Constance Mary, widow of the late Rev. W. F. Lucas.

HIND—BARKER.—On April 18th, at St. Peter's Church, Stockton-on-Tees, by the Rev. W. Chichester Barker, M.A., Vicar of Rostrevor, County Down, brother of the bride, assisted by the Rev. Henry Woodman, M.A., Vicar, Henry Hind, F.R.C.S., to Annie Charlotte Barker, daughter of the late William Barker, F.R.C.P. Irel.

KANTHACK—HENSTOCK.—On April 17th, at Fairfield, Liverpool, Alfred A. Kanthack, M.D., second son of E. Kanthack, British Consul, Pará, Brazil, to Lucie, second daughter of the late John Henstock of Edgemount, Edge-lane, Liverpool.

MCCANN—BOWYER-GRAHAM.—On Tuesday, April 16th, at Marylebone Parish Church, F. J. McCann, M.B., C.M., M.R.C.P., 47, Welbeck-street, Cavendish-square, London, to Lady Charlotte Ellen Gwendolin Bowyer-Graham, of Penne House, Leigh, Somerset, and Hawksley Hall, Devonshire.

OGLE—PERFECT.—On April 17th, at St. John's Church, Lewes, Sussex, John Gilbert Ogle, M.D. Oxon., fourth son of Rev. James Ambrose Ogle, M.A., Vicar of Sedgeford, Norfolk, to Edith Madeleine, third daughter of the Rev. A. P. Perfect, B.D., Rector of St. John's, Lewes.

SALTER—MYHILL.—On April 18th, at Holy Innocent's Church, Hornsey, Stephen Thomas Salter, M.A., M.B. Cantab., &c., of Crouch End, to Edith Mary, only daughter of Henry William Myhill of Crouch End, late of Calcutta.

DEATHS.

BEAMISH.—On April 17th, at High Barnet, Rev. Samuel Stephen Beamish, M.D., M.R.C.S.

BIRD.—On April 16th, at Osnaburgh-street, Regent's Park, John Bird, M.R.C.S., in the 84th year of his age.

BLASHFIELD.—On April 18th, at Marmora-road, Honour Oak, S.E., Capel Whitmore Blashfield, M.R.C.S., aged 75.

MILES.—On April 10th, at Rome, Edwin Josiah Miles, M.D., aged 65.

STEPHENSON.—At 3, Rubislaw-terrace, on April 14th, Janie Lydd Henston, wife of Wm. Stephenson, M.D., Professor of Midwifery, University of Aberdeen.

WEBB.—On April 12th, Sidney Roberts Webb, M.D. Edin., of the Baptist Missionary Society, Wathen, Congo Free State, aged 28.

WYATT.—On April 17th, George Robert Wyatt, M.D., F.R.C.S., aged 81.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, April 25th, 1895.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Apr'19	29·80	S.W.	48	47	106	64	47	0·04	Cloudy
,, 20	30·01	S.W.	57	52	101	64	48	...	Bright
,, 21	29·95	S.W.	55	54	84	62	52	...	Cloudy
,, 22	29·94	S.W.	54	51	99	59	51	...	Overcast
,, 23	29·59	S.W.	55	52	100	64	52	0·11	Cloudy
,, 24	29·70	S.W.	54	50	111	65	46	...	Cloudy
,, 25	29·43	E.	52	51	69	55	49	0·03	Raining

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (1 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynecological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), National Hospital for Diseases of the Heart and Paralysis (3 P.M. and 8 P.M.).

TUESDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1.30 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Gt. Northern Central (2.30 P.M.), National Hospital for Diseases of the Heart and Paralysis (3 P.M.).

WEDNESDAY.—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), National Hospital for Diseases of the Heart and Paralysis (3 P.M. and 8 P.M.).

THURSDAY.—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (2 P.M.), Soho-square (2 P.M.), North West London (2 P.M.), National Hospital for Diseases of the Heart and Paralysis (3 P.M.).

FRIDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), National Hospital for Diseases of the Heart and Paralysis (3 P.M.).

SATURDAY.—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

WEDNESDAY.—OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown. Dr. C. Hubert Roberts: On the Common Form of "White Leg" after Confinement.

THURSDAY.—OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—Card Specimens at 8 P.M. Papers:—Dr. P. H. Mules: A New Operation for Ptosis.—Mr. E. Treacher Collins: On Blood Staining of the Cornea.—Mr. W. H. Jessop: A case of Severe Hæmorrhage from an Ulcer of the Palpebral Conjunctiva. And other papers.

HARVEIAN SOCIETY.—8.30 P.M. Mr. Bernard Pitts: Some Remarks on the Surgery of the Rectum.

FRIDAY.—WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8 P.M., Case:—Dr. Seymour Taylor: (?) Abdominal Aneurysm of Aorta. 8.30 P.M. Papers:—Dr. Wm. Hunter: Antipyretics, their Use and Abuse.—Dr. Cagney: Peripheral Neuritis, its Diagnosis and Treatment.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

WEDNESDAY.—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3 P.M. Lecture by Dr. Gowers.

During the week marked copies of the following newspapers have been received:—*Somerset County Herald, Tuam News, Westmeath Examiner, Leicester Post, Sussex Daily News, Brighton Argus, Montrose Review, Newcastle Leader, Building News, East Essex Advertiser, Eastern Morning News, Hampshire Independent, Alnwick Gazette, Scotsman, Liverpool Courier, Arbroath Herald, Bradford Observer, Birmingham Mail, Sheffield Independent, Science Siftings, Local Government Chronicle, City Press, Mining Journal, Weekly Free Press and Aberdeen Herald, Bristol Mercury, Leeds Mercury, Colchester Gazette, Portobello Advertiser, Liverpool Daily Post, Scarborough Post, Yorkshire Post, Builder, Toronto Daily Mail, Architect, Times of India, Reading Mercury, Pioneer Mail, Hertfordshire Mercury, Courrier de la Presse, West Middlesex Standard, Surrey Advertiser, Local Government Journal, Sanitary Record, Elgin Courant, Kelso Mail, West Middlesex Advertiser, Banffshire Advertiser, Observer, Citizen, Evening Telegraph (Dundee), Islington Gazette, Derbyshire Courier, Scottish Highlander, St. Bartholomew's Hospital Journal, Llandudno Directory, Kendal Mercury, &c.*

Notes, Short Comments & Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICE.

UNDER no circumstances do the Proprietors authorise the insertion of loose advertisement circulars and handbills in THE LANCET. Any such announcements are inserted by the newsagents, whom the Proprietors cannot control. At the same time, the Manager will be glad if readers will send him copies of any circulars, with the name and address of the agent through whom they obtain THE LANCET, and the Manager will then endeavour to mitigate the nuisance.

A POLITE REJOINDER.

WE have received the following anonymous communication, accompanied by a newspaper cutting pasted on a postcard, for which we had the privilege of paying one penny as being "contrary to the regulations." If this is the only answer homœopaths can give to our arguments, further remarks on the subject would seem not to be called for:—

> "Put this in your pipe and smoke it. Perhaps it will tend to cool your ardour after last week's Editorial Leader.
>
> 'The Duchess of Teck will on Tuesday, July 9, open the new building of the London Homœopathic Hospital in Great Ormond-street, Bloomsbury.'
>
> "April 18, 1895."

J. B. R.—Probably the number of cases attended in the workhouse would suffice; but she must put the question to the body whose certificate is to be sought.

H. W. Bayly.—There are no such institutions. Application must be made to the matrons of the hospitals at which the applicant desires to be trained.

COMMERCIAL MEDICINE.

To the Editors of THE LANCET.

"SIRS,—I enclose a circular, which together with an appended statement of business sent to me by an enterprising firm of surgical instrument makers, reached me the other day. With the circular there was a post-office order for 15 francs, this constituting a commission of 25 per cent. on the orders taken from my patients since 1892. I am informed that such a reprehensible transaction is quite common here in Paris, but it is as well that our *confrères* in England should know that we English physicians practising in this city do not lend ourselves to such undignified proceedings. I need hardly say that the post-office order has been returned with an intimation that the code of professional morality prevailing in my own country forbids any such levelling relations between physician and *fournisseurs des hôpitaux*.

I am, Sirs, yours faithfully,

Paris, April 23rd, 1895. J. H. BARNARD, M.D.

"AN APPEAL."

Dr. J. B. Maurice, Lloran House, Marlborough, asks us to acknowledge the following sums on behalf of the lady whose case we published last week:—Dr. Champneys, £2; Dr. Domett Stone, £1 1s.; K. (Taunton), 10s. 6d. Further subscriptions will be thankfully received by Dr. J. B. Maurice, at the above address.

INJUDICIOUS FRIENDS AND NEWSPAPER PUFFS.—ISLE OF MAN.

WE have received a paragraph from the *Isle of Man Times* on the intended departure—not just yet—of a practitioner, we regret to say, from ill-health. Much is pardonable in words of praise of a parting medical man whose health is impaired. But it is very different when the newspaper is made the medium of describing the merits of his successor. We will not suppose that either the retiring gentleman or his successor is responsible for the puff that appears in our contemporary. They will readily see that if every practitioner in the island were to be so befriended by newspapers the profession would be placed in a very undignified light, and we feel confident that we shall have their concurrence in condemning this style of paragraph.

Junior.—The information as to the case is not very complete, but a course of the ammonio-citrate of iron with iodide of potassium for some time will probably improve things. Has our correspondent tried antipyrin for the dysmenorrhœa?

C. G. H.—Yes, if it be worth the trouble; but we are not prepared to say on whom the claim should be made.

A. B. C.—All such details should be matters of contract.

ON THE TREATMENT OF IMBECILES, DEDUCED FROM PERSONAL OBSERVATIONS IN NATURAL HISTORY.

To the Editors of THE LANCET.

SIRS,—I do not know whether any of your readers have ever noticed the enlargement of the skull consequent to the growth of the cerebrum in the human species in middle or late life as the result of travelling to distant places; but I can personally testify such growth most unmistakably evident even to the extent of nearly an inch, under circumstances like those above described, at the ages of thirty, forty-five, and sixty. Another instance may be noticed in the superior proportion of the cerebrum to the cerebellum, equal to the human proportion, in birds whose power of locomotion excels that of the human race. This is further supported by the fact that apterous birds, as the emu, ostrich, and apteryx, do not possess this proportion and are singularly deficient in animal instinct. I do not mention this as a merely curious incident in natural history, but that, if it can be proved correct, it might lead to some improvement in the management of patients suffering from deficient cerebral development. Firstly, all the idiot asylums should be so far affiliated that patients might be removed in regular succession, say once a year, from one house to another. Change of scene would do more to develop the intellect than any kind of in-door attempt at instruction; and on arrival at a new station they should be shown about the streets and suburbs of their new location. I think this matter is well worth looking into and investigating thoroughly by the faculty concerned in such cases and by the authorities under whom they act.

I am, Sirs, yours faithfully,

Colchester, April 6th, 1895. WALTER SCARGILL.

THE CASE OF MR. C. B. TOWNSHEND.

THE following additional subscriptions have been received and are hereby gratefully acknowledged:—

Mr. W. H. Brown (Leeds), per Mr. Henry Morris...	£2	2	0
Semper Fidelis	0	10	6
Mr. Jas. G. Macaskie (Belford)	0	5	0
Mr. T. Carter (Richmond)	1	0	0
Mr. G. W. Wickham (Winchester)	0	5	0
Dr. T. Rutherford Adams (Croydon)...	1	2	0
Dr. A. E. Wells (Cuckfield)	2	2	0
Mr. Thos. Corbett (Droitwich)	0	10	6
Dr. Wm. Travers (Phillimore-gardens)	1	1	0
Dr. C. Y. Biss (Harley-street)	£0	10	6
Galen	1	0	0
F.R.C.S.	0	10	0
Mr. J. Cæsar (Sheerness)...	0	10	6
Dr. E. Hotham Townsend (London)	2	0	0
Anonymous	0	0	1
Dr. F. P. Burroughs ...	0	5	0
Dr. A. U. Carter (London)	2	2	0
Mr. Allden (Bridport) ...	1	1	0
Mr. Walsh (Stonyhurst)...	1	1	0
M.A., M.D.	0	10	0
Mr. W. A. Wetwin (Bridlington Quay)...	0	10	0

Further subscriptions of the smallest amount (*vide* above) will be thankfully acknowledged by the Rev. H. Townshend, 41, King Henry's-road, South Hampstead, N.W.

HEALTH OFFICERS AND NOTIFICATION FEES.

Constant Reader.—A medical officer of health is entitled to the same fees under the Infectious Disease (Notification) Act in any and every sanitary district as any other medical man, with the single exception that he can, in respect of notification certificates arising out of his "public" practice, lay claim only to the sum of 1*s.* in place of the 2*s.* 6*d.* to which he is entitled for certificates of notifiable disease in regard of "private" patients.

REMOVAL OF NAMES FROM THE REGISTER.

Mr T. Garrett Horder.—The point is of great importance. Our correspondent should supply all the facts in detail to the General Medical Council before its approaching meeting, with a request for its further action in the matter. It is obvious that local registrars should be informed of removals from the Register for infamous conduct.

FREE HOMES FOR EPILEPTICS.

R. W. (Newcastle-on-Tyne).—The provision for the unfortunate patients mentioned by our correspondent is at present most inadequate. Recent cases which are likely to receive benefit from in-patient treatment are admitted *for a limited period* into both the free and the contributing wards at the National Hospital for the Paralysed and Epileptic, Queen-square (Secretary, Mr. Burford Rawlings), and the Hospital for Epilepsy and Paralysis, Portland-terrace, Regent's-park (Secretary, Mr. Howgrave Graham). For chronic cases there was until recently no provision whatever; but during the last few years three institutions have been established in this country for the admission of epileptics—viz., one for men and women at Maghull, near Liverpool; one at Chalfont in Buckinghamshire, founded by the National Society for the Employment of Epileptics (Secretary, Mr. G. P. Gaskell, 12, Buckingham-street, Strand); and the "Home of Rest for Epileptics" founded by the Countess of Meath at Godalming in Surrey, to which women and girls only are admitted. Not one of these useful enterprises, however, is at present receiving sufficient financial support from the public to enable it to admit patients without payment, although efforts are being made, we understand, at the Chalfont colony to start a special fund for this purpose. But at present payment has to be made by the patient and his friends, or by local boards of guardians, several of which are already supporting inmates both at Chalfont and Godalming. Admission to any of these homes, however, is conditional on there being no marked mental deterioration or alteration. For those epileptics who are imbecile, demented, or liable to dangerous impulses there are no public institutions available except the workhouse and the asylum. Abroad, both on the Continent and in America, the State recognises its responsibility for making provision for epileptics, and before long there is reason to hope that a similar arrangement will be made in this country.

A. B.—The fact of the tea becoming cloudy when cold is no indication of any harmful quality in the water. If our correspondent is in any doubt about the fitness for drinking of the treated water she had better send a sample to the county analyst for examination and report.

Asterion.—Our correspondent would be justified in pointing out the excess of title. It would be going a little too far to demand an apology.

TRAINING OF NURSES IN AMERICA.

To the Editors of THE LANCET.

SIRS,—A lady who is about to enter a hospital in New York for training as a nurse is anxious to know whether her holding an American certificate is likely to militate against her success on her return to England to practise. As I am not aware what repute a nurse trained in America would hold here, I should be glad if you would express an opinion. I am, Sirs, yours faithfully,

April 25th, 1895. "HOC AGE."

NATIONAL HEALTH SOCIETY.

THE annual distribution of medals and certificates will take place (by kind permission of the Duke of Westminster) at Grosvenor House on May 11th. Her Royal Highness Princess Christian has consented to be present on this occasion, and several eminent speakers will address the meeting. Members of the society are invited to attend.

Inquirer.—The use of preservatives in milk is open to objection; but the least objectionable antiseptic, perhaps, for this purpose is borax. The only satisfactory and scientific way of preserving milk is to sterilise it by means of steam, sealing the vessel containing it before air can enter.

"WANTED, A BED-REST."

To the Editors of THE LANCET.

SIRS,—In answer to "Subscriber," I can with confidence recommend the "Core Bed-rest," made by Messrs. Arnold and Sons, as one of the most useful, practical, and economical. I have had them supplied to several of my patients, who one and all speak of their comfort and easy adjustment. I am, Sirs, yours truly,

Weston-super-Mare, April 24th, 1895. GRÆME B. FRASER.

MEDICAL PRACTICE AT ASHTON-UNDER-LYNE.

THE following is in print:—

"Dr. ——— has opened the Independent Dispensary for the Benefit of the Working Classes! at 88, Katherine-street, Penny Meadow, Ashton, where he may be Consulted Daily from 9 A.M. till 12 noon, and from 6 P.M. till 9 P.M. Fees:—Advice and Medicine only, 6*d.*; Visits within a Mile of the Dispensary, 1*s.*"

We have omitted the name of the practitioner.

Mr. H. D. Kendall.—We would gladly assist our correspondent if we could; but it is impossible for us to reply to individual cases.

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